

NUMBERED DEMOLITION NOTES -

PLUMBING DEMOLITION DRAWINGS PD101 AND PD102

GENERAL: AS A "RENOVATE—AS—NEW" PROJECT, UNLESS SPECIFICALLY NOTED BELOW TO BE TREATED OTHERWISE, EXISTING PLUMBING EQUIPMENT, FIXTURES AND PIPING SHALL, AT THE PROPER PROJECT PHASE, BE DISCONNECTED AND REMOVED, WITH ALL RELATED ACCESSORIES AND BRANCH WATER, WASTE, SANITARY, VENT AND GAS PIPING. PROJECT PHASING SHALL BE ACCORDING TO PROJECT PHASING PLANS AND NARRATIVE.

EXISTING UNDERSLAB SANITARY/WASTE PIPE MAINS MAY REMAIN IF TV SCOPING REVEALS THE CONDITION OF THE UNDERSLAB PIPE IS SUFFICIENTLY VIABLE ENOUGH NOT TO REQUIRE REPLACEMENT, ACCORDING TO THE JUDGEMENT OF THE PROJECT ENGINEER.

- (1) CLASSROOM COUNTER-MOUNT SINK OR COMBINATION SINK/DRINKING FOUNTAIN
- 2 PRIVATE USE BATHROOM: (1) FLOOR-MOUNT FLUSH VALVE WATER CLOSET, (1) WALL-MOUNT LAVATORY
- (3) WALL-MOUNT WATER COOLER -TO REMAIN; REFEED FROM NEW SERVICES
- (5) GIRLS' TOILET ROOM: (4) FLOOR MOUNT FLUSH VALVE WATER CLOSETS, (2) WALL MOUNT LAVATORIES, (1) 3"FD
- 6 BOYS' TOILET ROOM: (3) FLOOR MOUNT FLUSH VALVE WATER CLOSETS, (3) FLOOR MOUNT URINALS, (2) WALL MOUNT LAVATORIES
- 7) PRIVATE USE BATHROOM: (1) FLOOR-MOUNT FLUSH VALVE WATER CLOSET, (1) VANITY BASE-MOUNT LAVATORY
- (8) COUNTER-MOUNT NURSE'S SINK IN BASE CABINETRY
- (9) COUNTER-MOUNT KITCHEN-TYPE SINK
- 10 LIQUID PROPANE (LP) GAS STORAGE TANK; ARRANGE FOR TEMPORARY RELOCATION BY PROPANE SUPPLIER TO ALLOW FOR NEW TRANSFORMER INSTALLATION; ARRANGE FOR DISCONNECTION AND REMOVAL BY PROPANE SUPPLIER, AND REMOVE ALL RELATED GAS PIPING UNDERGROUND AND WITHIN BUILDING, AFTER NEW AREA 'B' KITCHEN
- 11) PRE-RINSE/POT SINK WITH ADJACENT BOOSTER HEATER
- (12) COMMERCIAL DISHWASHER WITH ADJACENT BOOSTER HEATER
- (3) VITREOUS CHINA LAV-TYPE HANDWASHING SINK
- (14) 2-BAY PREP SINK WITH DRAINBOARD EACH SIDE
- (6) LP GAS-FIRED COOKING EQUIPMENT

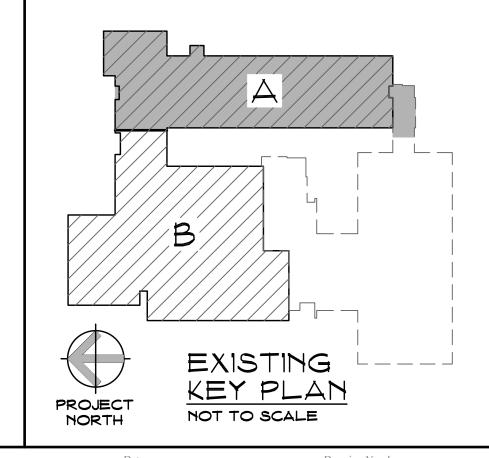
(5) LP GAS-FIRED OVEN

- (7) COMMERCIAL KITCHEN HOOD WITH ANSUL FIRE SUPPRESSION SYSTEM
- (19) FLOOR MOP RECEPTOR EXISTING TO REMAIN

ANSUL CABINET OVER DOOR)

- 20 120 GALLON 4.5KW/4.5KW NON-SIMULTANEOUS ELEMENT ELECTRIC WATER HEATER
- (2) WALL-MOUNT WATER COOLER TO REMAIN; REFEED FROM NEW SERVICES
- 22) PRIVATE USE BATHROOM: (1) FLOOR-MOUNT FLUSH VALVE WATER CLOSET,
- 23) PRIVATE USE FIBERGLASS SHOWER STALL WITH SHOWER HEAD, CONTROLS AND DRAIN
- (24) GIRLS' TOILET ROOM: (3) FLOOR MOUNT FLUSH VALVE WATER CLOSETS, (3) WALL MOUNT LAVATORIES, (1) 3"FD
- (25) BOYS' TOILET ROOM: (1) FLOOR MOUNT FLUSH VALVE WATER CLOSETS, (2) FLOOR MOUNT URINALS, (3) WALL MOUNT LAVATORIES, (1) 3"FD
- 26 ROUGHED-IN 4"FD LOCATION WITH PLUG AND SOLID COVER.
- 27 NON-FREEZE WALL HYDRANT TO REMAIN
- LIMITED AREA SPRINKLER SYSTEM OFF DOMESTIC WATER PIPING SYSTEM, WITH
- WATER SERVICES TO (2) SINKS AND (1) WATER COOLER ROUTED OVERHEAD; VIF EXACT ROUTING AND REMOVE





Expansion and Renovate as New Project - PHASE 1 of 3

Ellington, Connecticut 06029

Crystal Lake Elementary School
284 Sandy Beach Road



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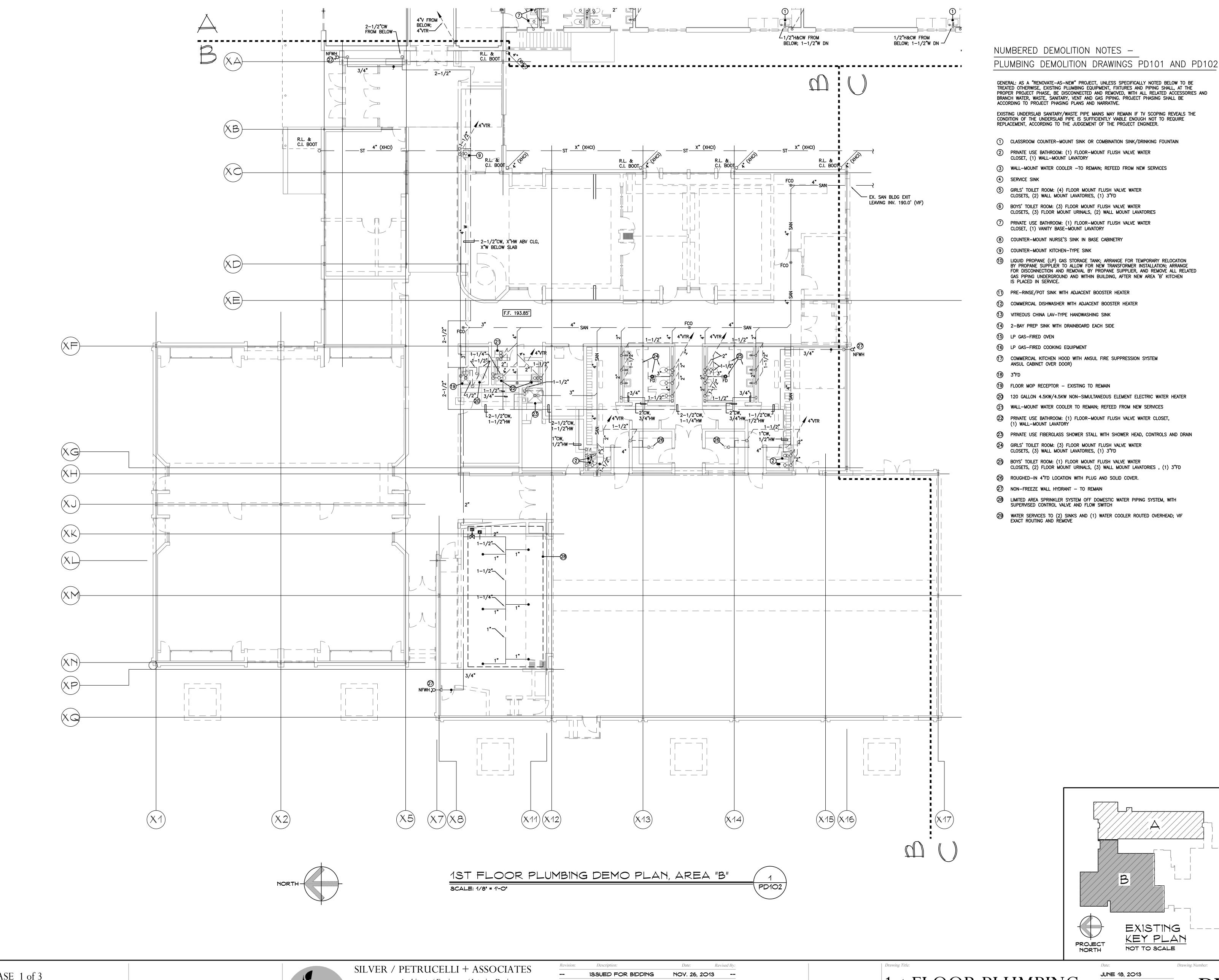
Revision: Description:

1st FLOOR PLUMBING DEMO PLAN, AREA "A" Drawn By: State Project Number: 048-0058 EA/RR/PS

JUNE 18, 2013 AS NOTED Project Number:

12.140

Drawing Number: 101



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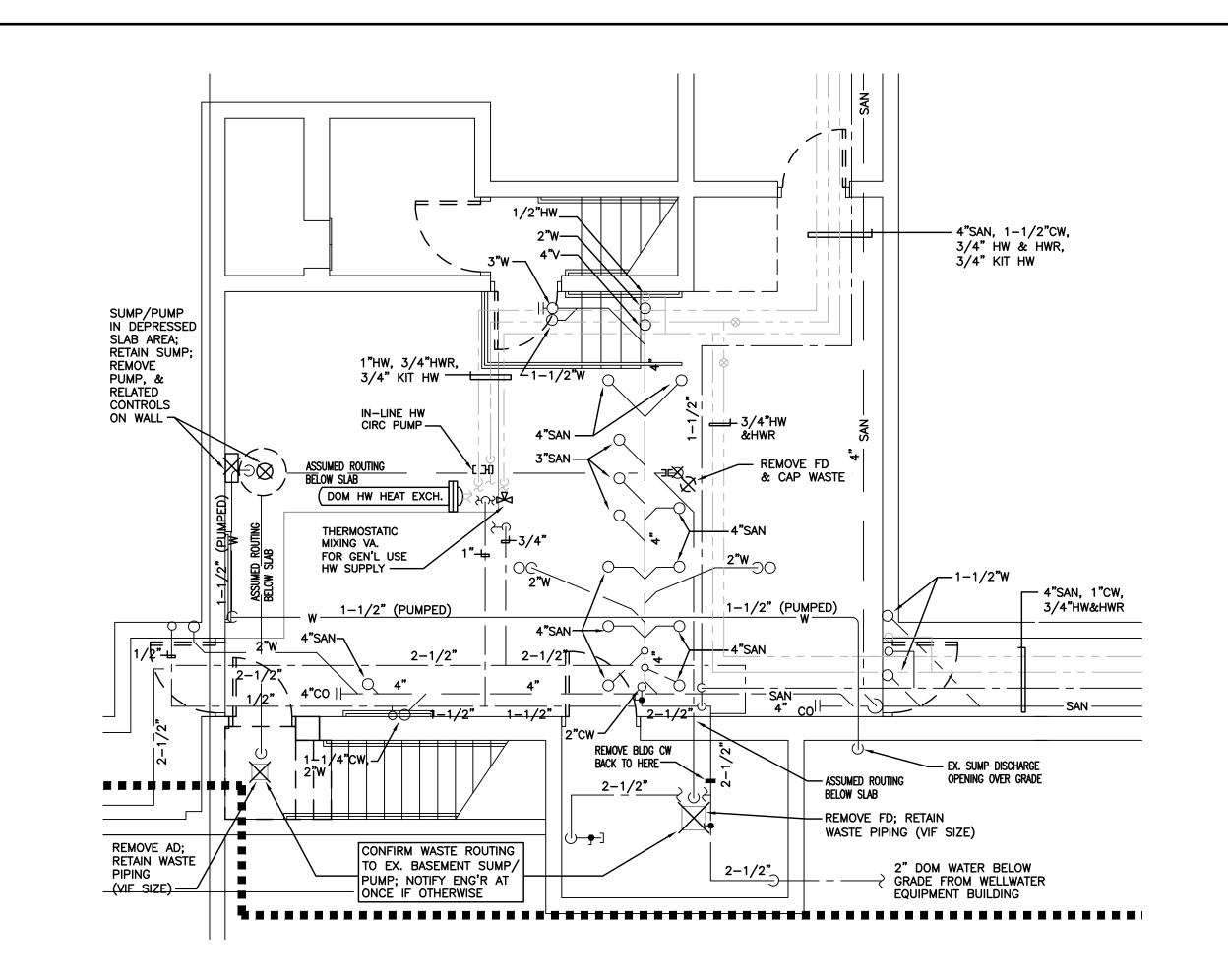
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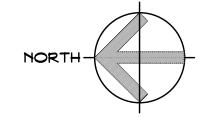
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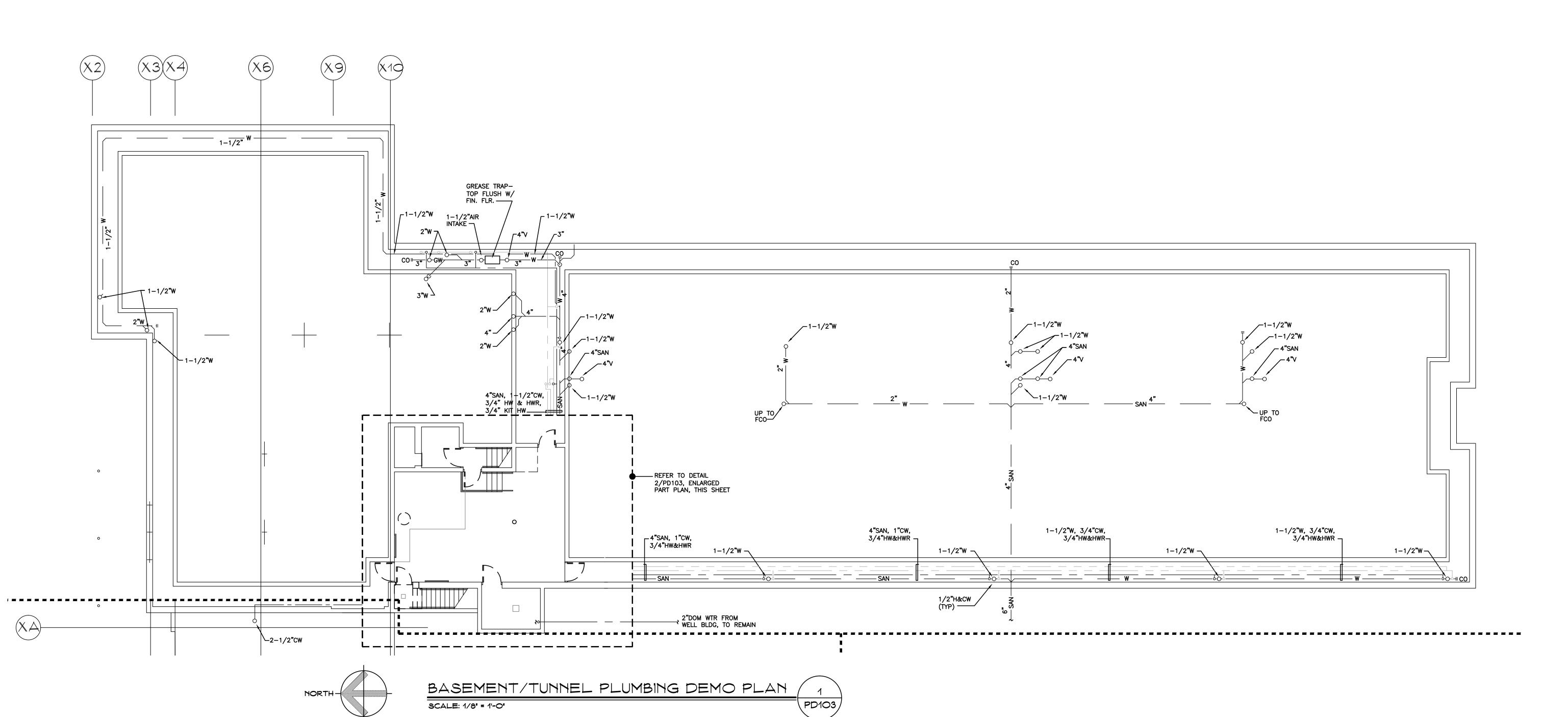
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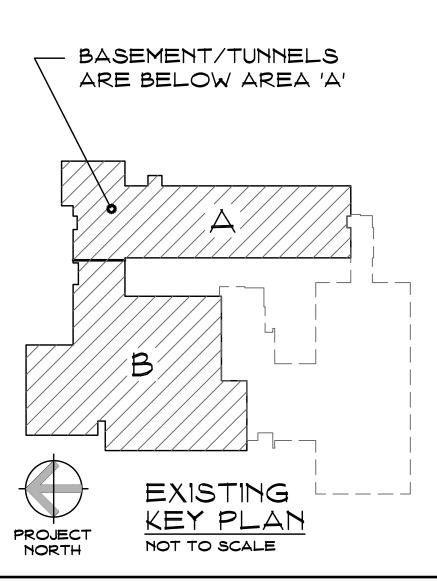
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ENLARGED PART PLAN - BASEMENT PLUMBING DEMO PLAN SCALE: 1/4" = 1'-0"





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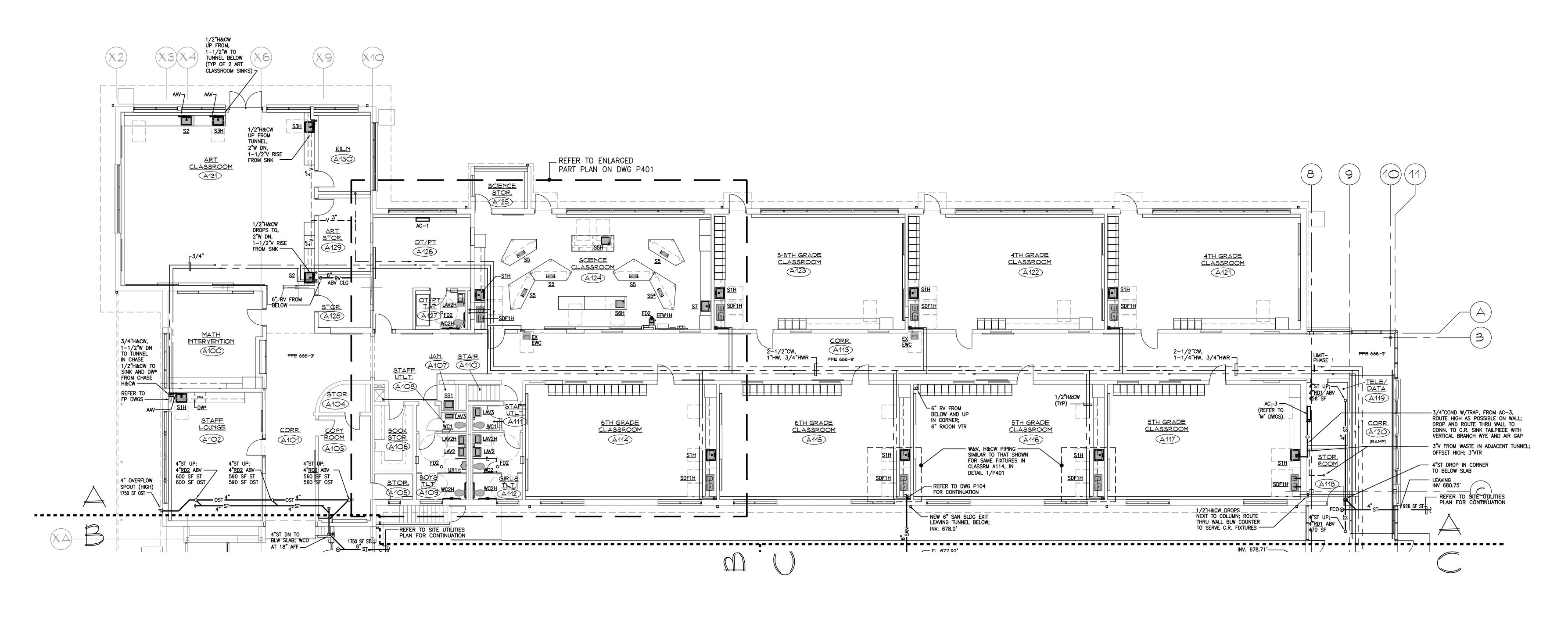
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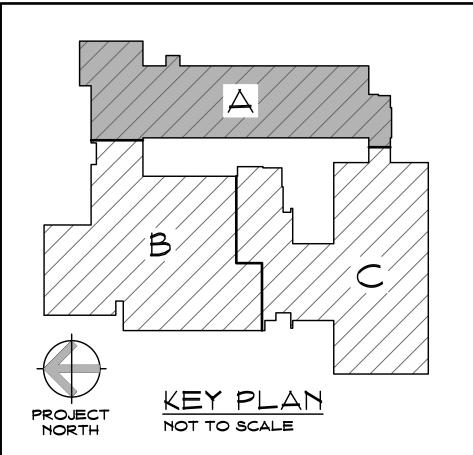
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BASEMENT/TUNNEL PLUMBING DEMO PLAN State Project Number: 048-0058 EA/RR/PS

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1ST FLOOR PLUMBING
PLAN, AREA "A"
State Project Number: 048-0058 EA/RR/PS

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JUNE 18, 2013

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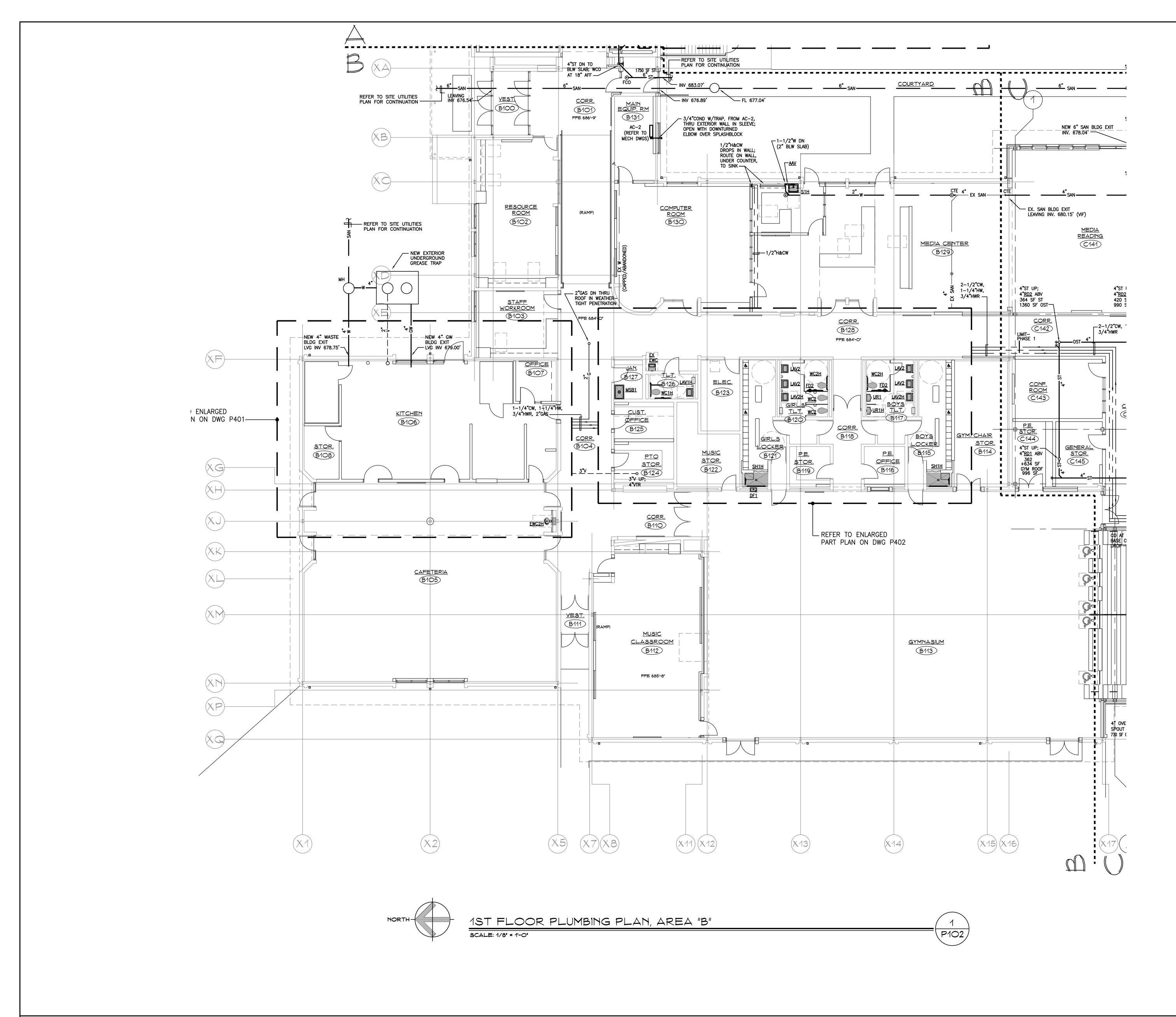
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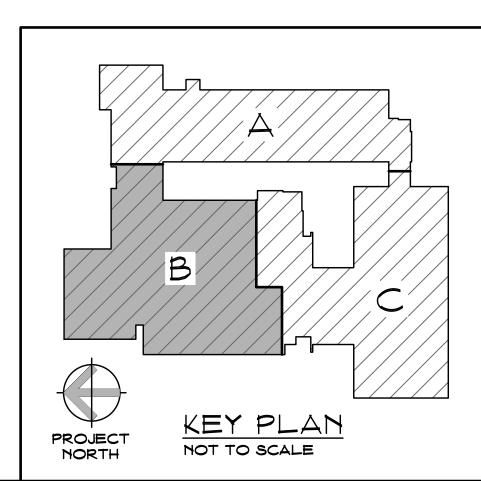
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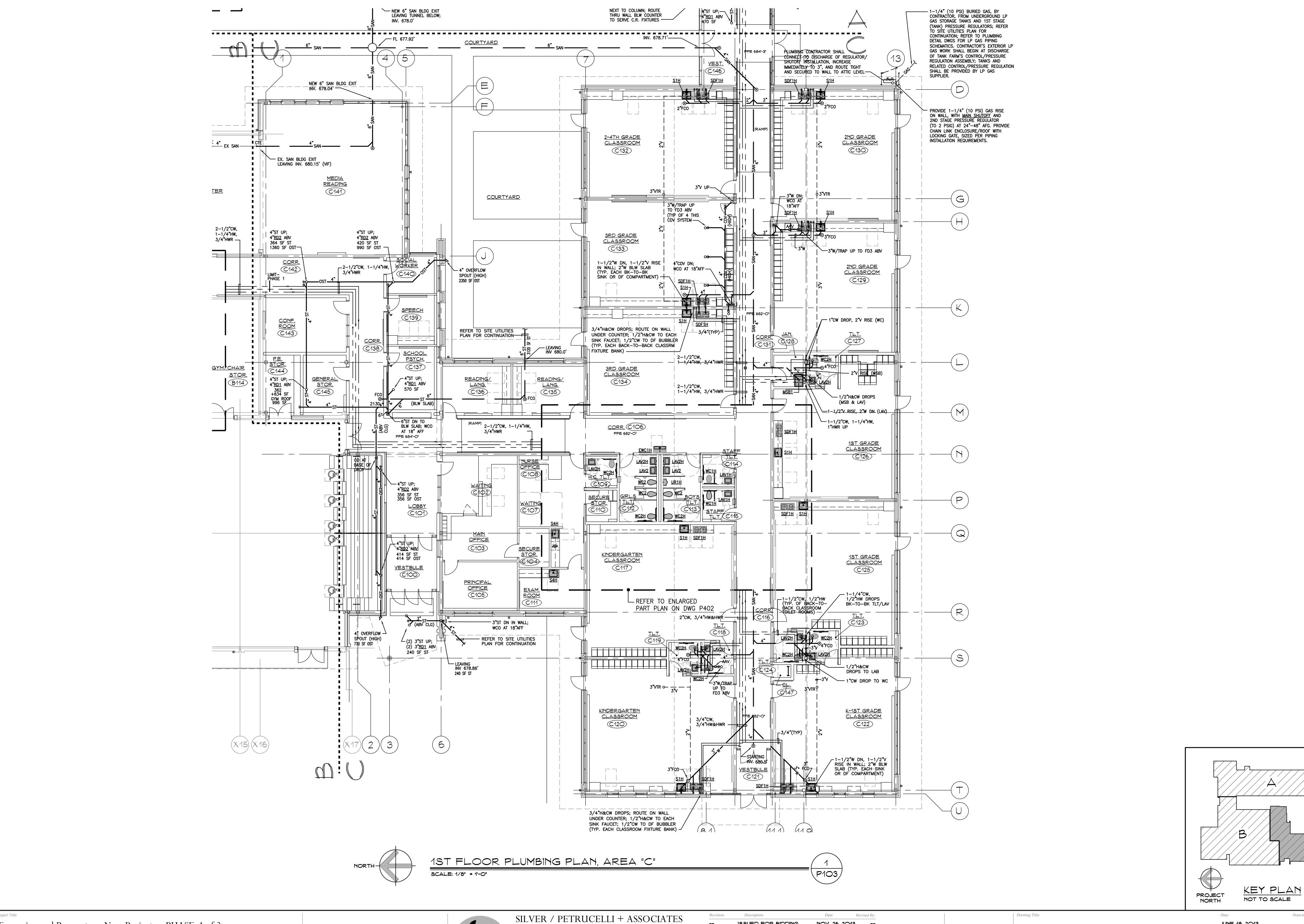
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PLAN, AREA "B"
State Project Number: 048-0058 EA/RR/PS

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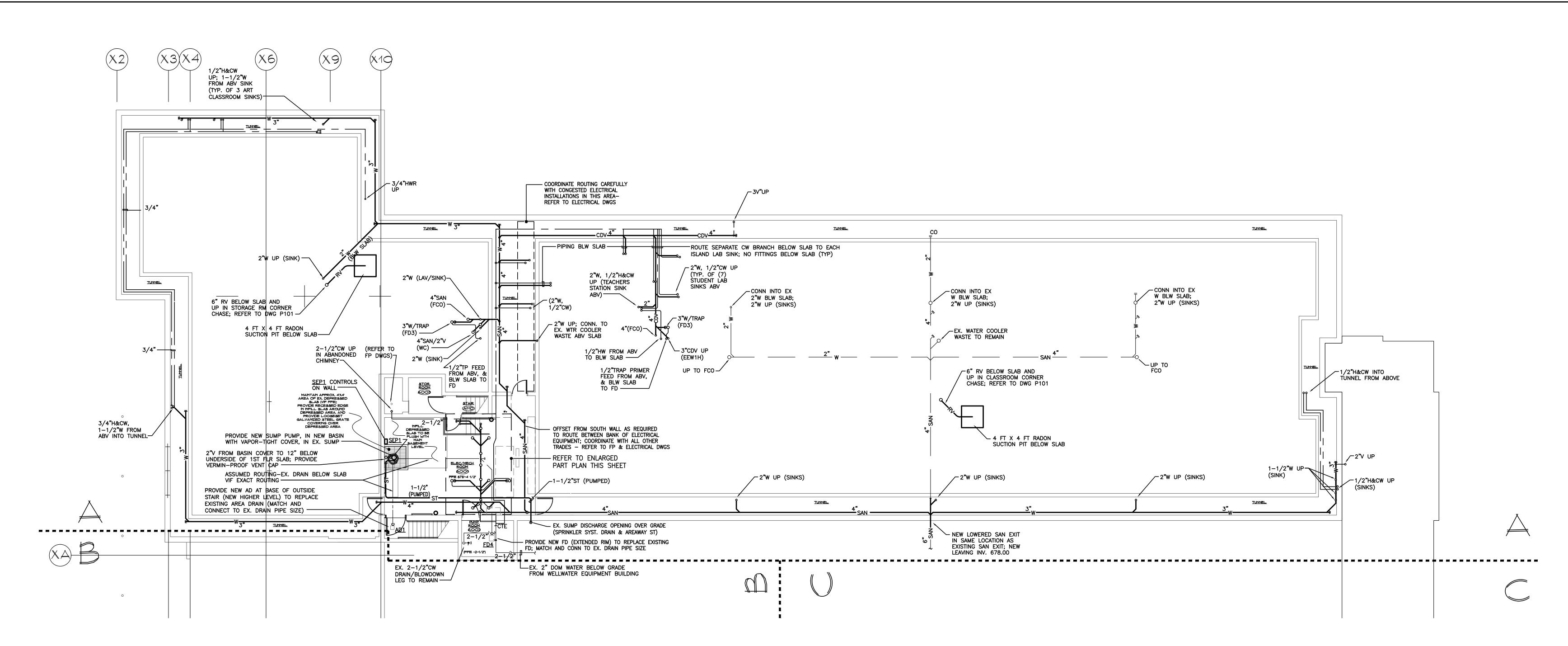
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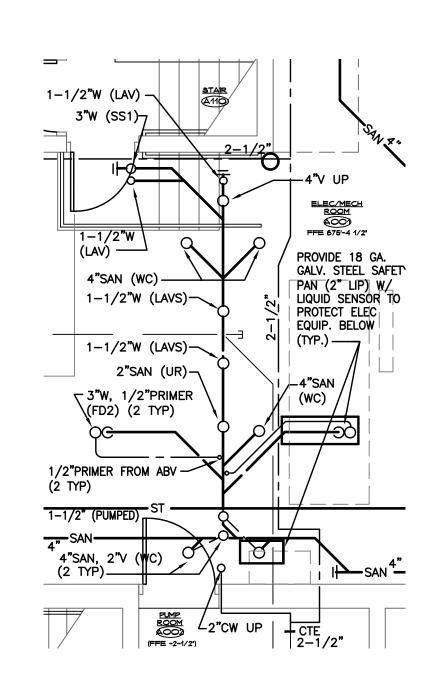
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1ST FLOOR PLUMBING PLAN, AREA "C" State Project Number: 048-0058 EA/RR/PS

Drawing Number: JUNE 18, 2013 P103 AS NOTED Drawn By: MBQ Project Number:







ENLARGED PART PLAN (FORMER) BOILER ROOM AOO1

SCALE: 1/4" = 1'-0"

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P104

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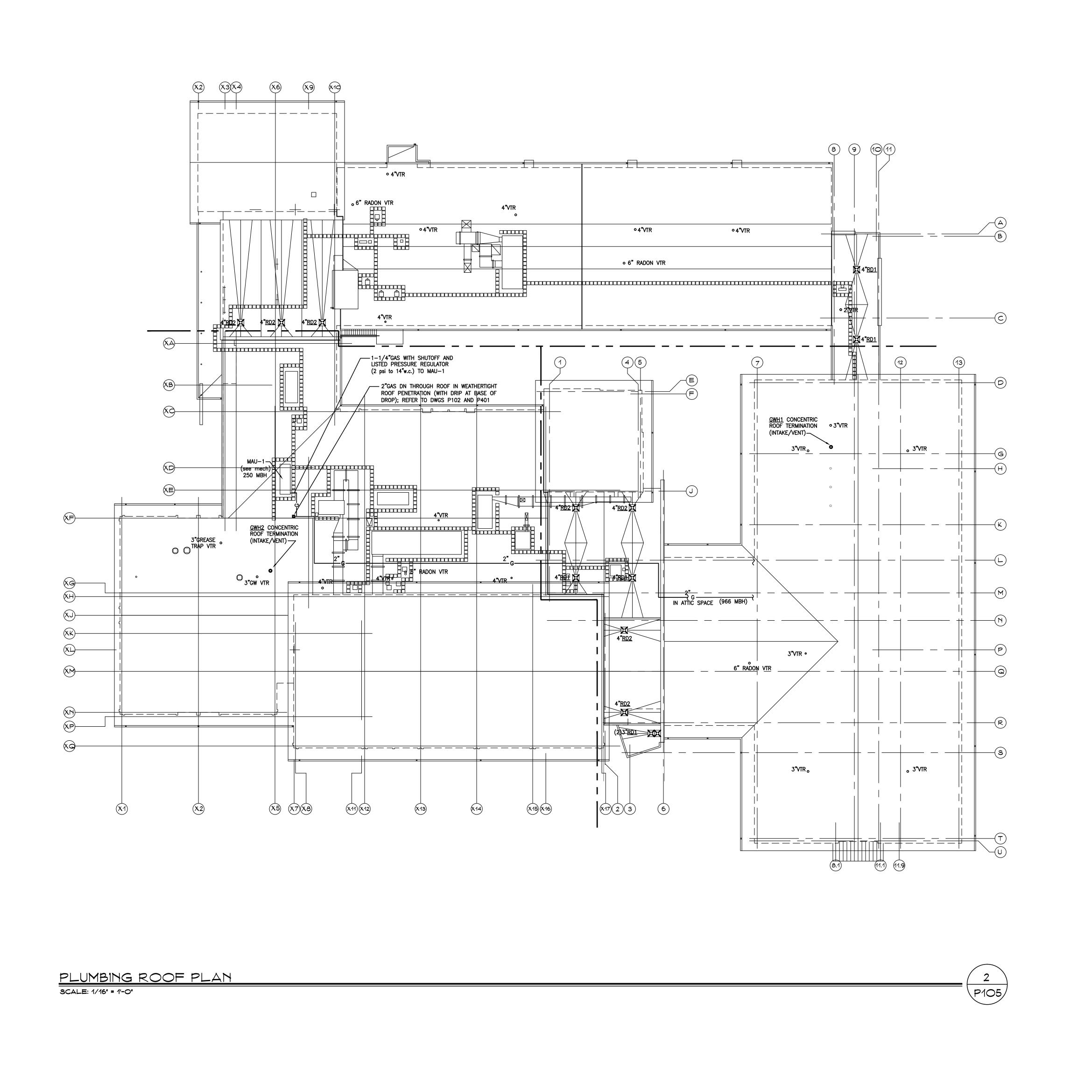
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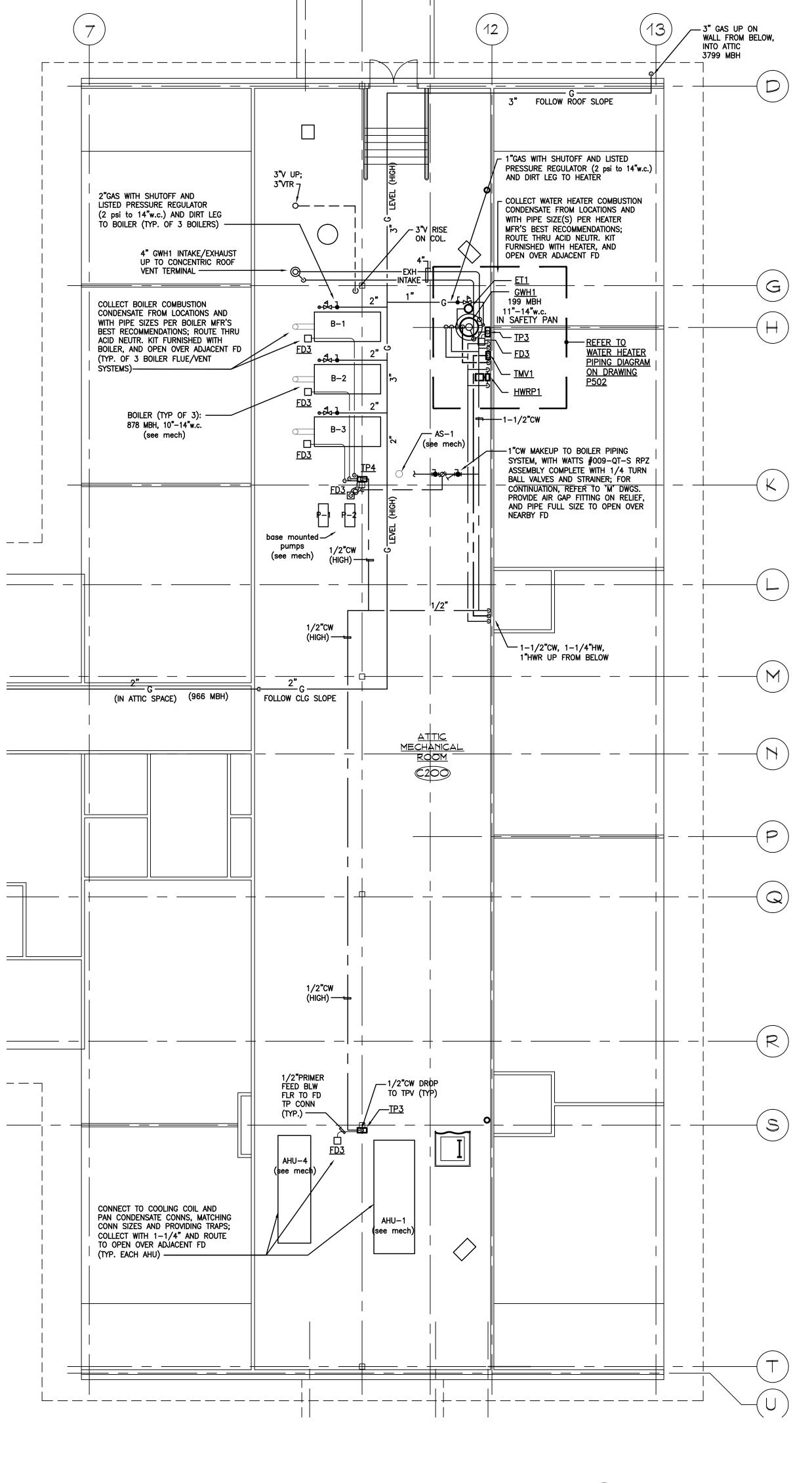
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BASEMENT & TUNNEL PLUMBING PLAN

State Project Number: 048-0058 EA/RR/PS

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PLUMBING ATTIC PLAN - AREA 'C'

SCALE: 1/8" = 1'-0"

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PLUMBING PLANS
State Project Number: 048-0058 EA/RR/PS

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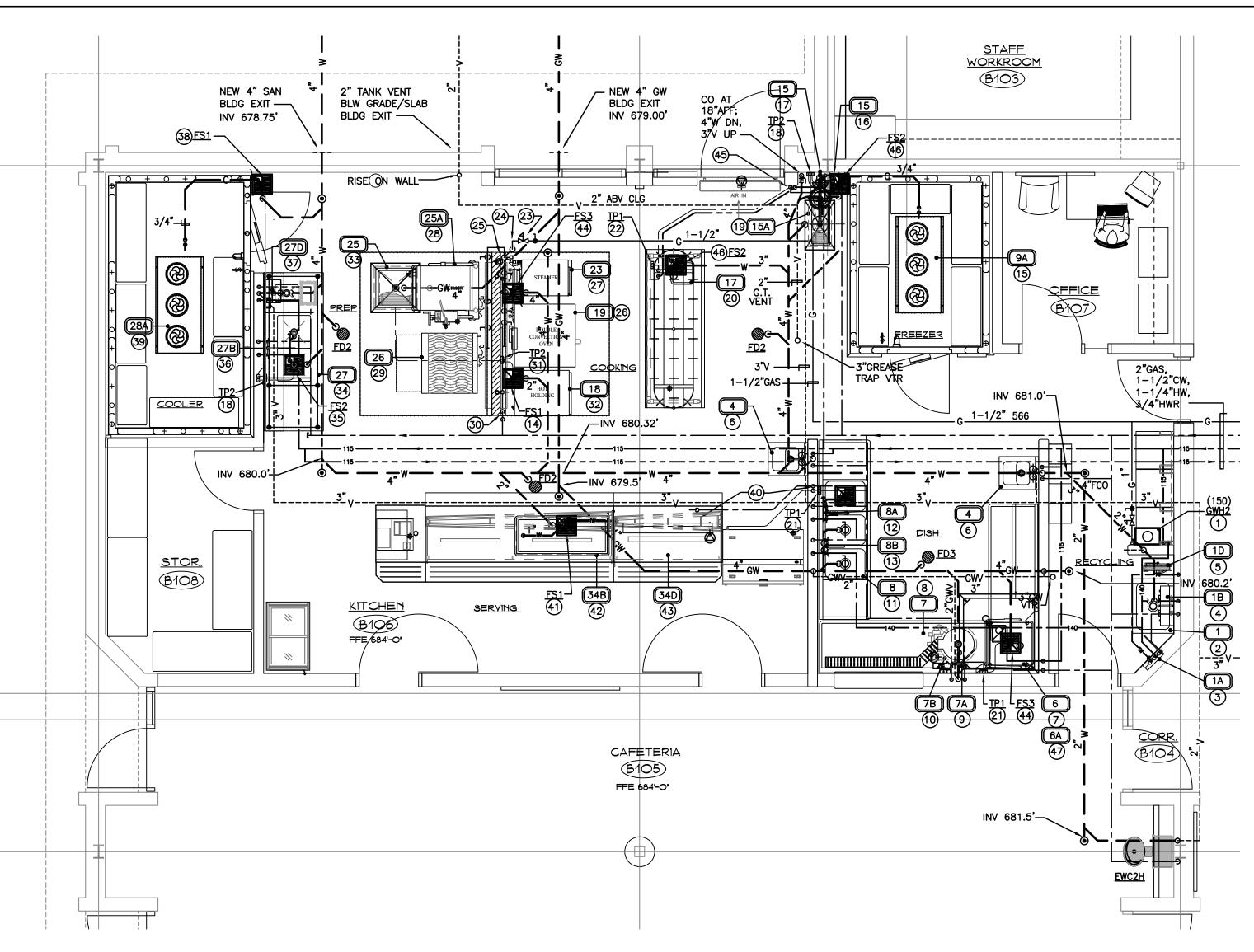
AS NOTED

Drawn By:

MBQ

Project Number:

12.140



NUMBERED NOTES - DETAIL 2/P401 "1ST FLOOR PLUMBING PART PLAN, AREA "B" -VICINITY OF KITCHEN B106"

- NUMBERS IN RECTANGULAR BOXES CORRESPOND TO FOOD SERVICE EQUIPMENT ITEM NUMBERS IN FOOD SERVICE DRAWINGS. ALL ITEMS SO DESIGNATED SHALL BE <u>FURNISHED</u> BY THE FOOD SERVICE CONTRACTOR. ITEMS SO DESIGNATED SHALL BE <u>INSTALLED</u> BY THE PLUMBING CONTRACTOR UNDER THE GC'S WORKSCOPE, UNLESS SPECIFICALLY NOTED TO BE INSTALLED BY OTHER THAN THE GC IN DETAIL 1 ON DWG FS-1.1.1 "CAFETERIA EQUIPMENT SCHEDULE". PLUMBING CONTRACTOR SHALL ROUGH—IN PLUMBING SERVICES FOR PROVIDE ALL MFR—REQUIRED/CODE—REQUIRED ACCESSORIES, (UNLESS FURNISHED WITH THE ITEM—VERIFY PRIOR TO BID) AND MAKE ALL FINAL PLUMBING CONNECTIONS TO ALL FOOD SERVICE EQUIPMENT, FIXTURES, FLOOR DRAINAGE ITEMS, ETC., REGARDLESS OF WHICH CONTRACTOR FURNISHES AND/OR INSTALLS EACH ITEM. <u>PLUMBING CONTRACTOR SHALL REFER TO FOOD SERVICE ('FS') DRAWINGS AND SPECS (SECTION 114000) FOR ADDITIONAL PLUMBING REQUIREMENTS/SCOPE RELATED TO FOOD SERVICE ITEM INSTALLATIONS. SUCH REQUIREMENTS ARE PART OF PLUMBING CONTRACTOR'S SCOPE.

 NOTE: ASTERISK (*) IN EQUIPMENT CALLOUTS IN THE FOLLOWING NOTES INDICATES THAT THE ITEM IS TO BE FURNISHED BY THE FOOD SERVICE CONTRACTOR.</u>
- TANKLESS GAS—FIRED WATER HEATER (<u>GWH2</u>) MOUNT ON WALL, BOTTOM AT 4'-0" AFF. PROVIDE 3/4" GAS DROP WITH DIRT LEG, SHUTOFF, UNION, PRESSURE REGULATOR, AND LISTED FLEXIBLE GAS CONNECTOR. 3/4" (115'F) INLET, 3/4"(140'F) OUTLET, WITH UNIONS AND SHUTOFFS. REFER TO PIPING DETAIL ON DWG P502, AND SPEC ON DRAWING P501.
- ② MOP SINK*: 1/2"H&CW, 2"W WITH TRAP, 1-1/2"V (UP IN WALL)
- (3) HOSE REEL CONTROL BOX*: 1/2" (140°F)HW, 1/2"CW

 (4) MOP SINK SERVICE FAUCET*: 1/2" (140°F)HW AND CW
- HOSE REEL WITH SPRAY*: 1/2"HW (TEMPERED THROUGH CONTROL BOX)
- 6 HAND SINK*: 1/2"(115°F)HW, 1/2"CW, 1-1/2"W WITH TRAP, (2"W BLW SLAB), 1-1/2"V

 DISHWASHER WITH BOOSTER HEATER*: 3/4"(115°F)HW; 1/2"CW (FOR DRAIN WATER
- TEMPERING); 1-1/2" INDIRECT WASTE TO OPEN OVER FLOOR SINK (FS3) BENEATH. ALSO, PROVIDE ALL INTERCONNECTING PIPING, VALVES, PRESSURE AND TYEMPERATURE REGULATING/SAFETY DEVICES BETWEEN BOOSTER HEATER AND DISHWASHER, PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 8 <u>SOILED DISHTABLE WITH TROUGH</u>*: 1-1/2" INDIRECT WASTE WITH TRAP, TO OPEN OVER LOCAL FLOOR SINK (BELOW DISHWASHER*)
- 9 PRERINSE FAUCET*: 1/2"(140°F)HW, 1/2"CW
- 1 3-COMPARTMENT SINK*: 1-1/2"LEVER GW WITH TRAP (TYP. EACH COMPARTMENT); COLLECT COMPARTMENT GWs WITH 2"GW; 2"GW DN, 2"GWV UP IN WALL
- WALL-MOUNTED FAUCET*: 1/2"(140°F)HW, 1/2"CW
- (3) WALL-MOUNTED POT-FILLER FAUCET*: 3/4"(140°F)HW, 3/4"CW; PROVIDE CHECKS ON SUPPLIES TO PREVENT HEAT MIGRATION TO OTHER FIXTURES; PROVIDE FLOW RESTRICTOR ON HW SUPPLY TO LIMIT FLOW TO 3.0 GPM.
- (4) FS1: 2"W WITH TRAP; 1/2" PRIMER FEED TO PRIMER CONN
- (5) FREEZER EVAPORATOR COIL*: CONNECT TO 3/4"CONDENSATE; INCREASE TO 1" WITH TRAP AND ROUTE TO OPEN OVER LOCAL FS1 WITH AIR GAP PER CODE
- THERMOSTATIC MIXING VALVE (TMV)*: FURNISHED BY KEC WITH EYEWASH/SHOWER STATION*; WALL-MOUNT, BOTTOM AT 60" AFF (MINIMUM); COORDINATE EXACT LOCATION WITH ALL OTHER TRADES; IF MOUNTING ON FREEZER WALL, CONFORM TO FREEZER MFR'S REQ'MTS, PROVIDING OTHER SUPPORTS AS/IF REQUIRED. 3/4"(115"F)HW AND 3/4"CW INLETS, 1"TEMPERED WATER (TW-85"F) DISCHARGE; INCREASE IMMEDIATELY TO 1-1/4"; ROUTE TO EYEWASH/SHOWER STATION*.
- EYEWASH/SHOWER STATION*: 1-1/4"TW TO INLET; 1-1/2" WASTE WITH TRAP FROM DRAIN CONNECTION TO OPEN OVER LOCAL FLOOR SINK.
- 18) TP2 ABOVE CEILING ON COLUMN; 1/2"CW TO TP2; 1/2"TRAP PRIMER FEED, VIA TP2 DISTRIBUTION UNIT, TO EACH LOCAL FLOOR TROUGH OR FLOOR SINK
- (9) FLOOR TROUGH*: 2"W WITH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION
- ADA WORK TABLE WITH SINK/FAUCET*: 1/2"(115'F)HW AND 1/2"CW ('K' COPPER ROUTED N PVC SLEEVE BELOW SLAB) TO SINK'S ELECTRONIC FAUCET; 1-1/2"W WITH TRAP TO OPEN OVER LOCAL FLOOR SINK
- 2) TP1 ABOVE CEILING ON COLUMN; 1/2"CW TO TP1; 1/2"TRAP PRIMER FEED IN WALL AND BELOW TO SLAB TO FLOOR SINK BELOW ISLAND SERVING LINE EQUIPMENT
- 2 TP1 (BOTT/MIN 12" AFF), SECURED TO ISLAND WORK TABLE WITH REMOVABLE STAINLESS STEEL STRAPS/HARDWARE. 1/2"CW ('K' COPPER ROUTED IN PVC SLEEVE BELOW SLAB) TO TP1; 1/2"TRAP PRIMER FEED TO OPEN OVER LOCAL FS2 (AVOID CONFLICT WITH ADA CLEARANCE REQUIREMENTS BELOW SINK)
- 23 1-1/2" GAS ABOVE CEILING; PROVIDE MANUAL SHUTOFF AND VENT LIMITING PRESSURE REGULATING VALVE (2 PSI INLET, 13"W.C. DISCHARGE, 566 MBH)
- DROP 1-1/2" GAS TO RUN TIGHT TO UNDERSIDE OF HOOD

- OFFSET 1-1/2"GAS TIGHT TO UNDERSIDE OF HOOD TO DROP ON WALL; AT 36" AFF MAX., PROVIDE MANUAL SHUTOFF UPSTREAM OF SOLENOID VALVE (INTERLOCKED WITH HOOD FIRE SUPPRESSION SYSTEM). ROUTE 1-1/2" GAS MANIFOLD ON BOTH SIDES OF COOKING WALL AT 24" AFF.
- CONVECTION OVEN (DOUBLE)*: (2) [55 MBH] 3/4"GAS CONNS. REQUIRED; FOR EACH CONN., PROVIDE 3/4" BOTTOM TAKEOFF FROM GAS MANIFOLD, WITH SHUTOFF, BOTTOM CAP, AND TEE FOR FLEX GAS CONNECTOR (PER ARRANGEMENT INDICATED ON FOOD SERVICE DETAIL 7/FS-1.4.1).
- BOILERLESS GAS STEAMER*: (2) [62 MBH] 1/2"GAS CONNS. REQUIRED; FOR EACH CONN., PROVIDE 1/2" BOTTOM TAKEOFF FROM GAS MANIFOLD, WITH SHUTOFF, BOTTOM CAP, AND TEE FOR FLEX GAS CONNECTOR (PER ARRANGEMENT INDICATED ON FOOD SERVICE DETAIL 7/FS-1.4.1). WASTE: CONNECT TO 2-1/2" DRAIN, INCREASE IMMEDIATELY TO 3", PROVIDE TRAP, AND ROUTE TO OPEN OVER LOCAL FLOOR SINK WITH AIR GAP PER CODE.
- TILT SKILLET*: (1) [125 MBH] 3/4" GAS CONN. REQUIRED; PROVIDE 3/4" BOTTOM TAKEOFF FROM GAS MANIFOLD, WITH SHUTOFF, BOTTOM CAP, AND TEE FOR FLEX GAS CONNECTOR (PER ARRANGEMENT INDICATED ON FOOD SERVICE DETAIL 7/FS-1.4.1).
- 29 <u>COOKING RANGE</u>*: (1) [207 MBH] 3/4" GAS CONN. REQUIRED; PROVIDE 3/4" BOTTOM TAKEOFF FROM GAS MANIFOLD, WITH SHUTOFF, BOTTOM CAP, AND TEE FOR FLEX GAS
- CONNECTOR (PER ARRANGEMENT INDICATED ON FOOD SERVICE DETAIL 7/FS-1.4.1).

 30 1"CW DROP TO RUN TIGHT TO UNDERSIDE OF HOOD; AND DROP ON COOKING

WALL; ROUTE 1"CW ON WALL AT 30" AFF.

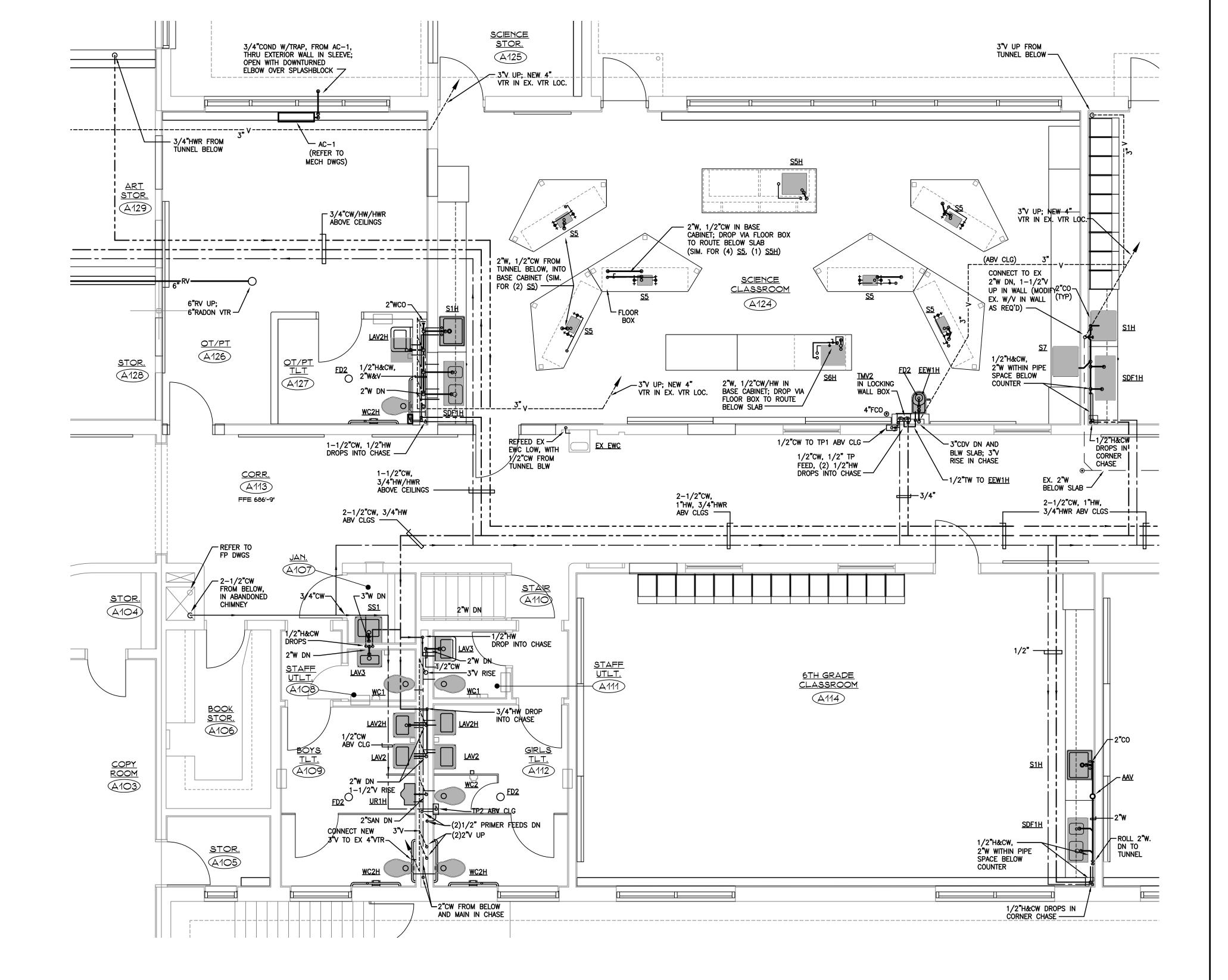
- 3) 1/2"DROP WITH SHUTOFF TO TP2; 1/2"TRAP PRIMER FEED, VIA TP2 DISTRIBUTION UNIT, TO EACH LOCAL FLOOR TROUGH OR FLOOR SINK
- MOLDING CABINET PROOFER*: 1/2" BOTTOM TEE OFF CW MANIFOLD, WITH SHUTOFF AND 1/4" REDUCER; CONNECT TO 1/4" DRAIN, INCREASE IMMEDIATELY TO 1", PROVIDE TRAP
- AND ROUTE TO OPEN OVER LOCAL FLOOR SINK WITH AIR GAP PER CODE.

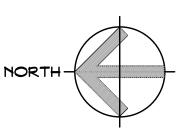
 33 FLOOR TROUGH*: 4" GW WTH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION
- WORK (PREP) TABLE WITH SINK*: 2-BAY PREP SINK: COLLECT (2) 1-1/2" WASTES WITH 1-1/2", PROVIDE TRAP, AND ROUTE TO OPEN OVER LOCAL FLOOR SINK;
- HANDWASH SINK: 1-1/2"W WITH TRAP; 2"W DN, 1-1/2"V UP IN WALL
- 55 FLOOR SINK: 3" W WTH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION

 56 BACKSPLASH MOUNT FAUCET*: 1/2"(115°F)HW, 1/2"CW
- 37) ELECTRONIC HANDWASH FAUCET*: 1/2"(115°F)HW, 1/2"CW
- 38 FLOOR SINK: 2"W WTH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION
- 39 <u>WALK-IN COOLER EVAPORATOR COIL*</u>: CONNECT TO 3/4" CONDENSATE; INCREASE TO 1" WITH TRAP AND ROUTE TO OPEN OVER LOCAL FS1 WITH AIR GAP PER CODE
- 40 1/2"CW DROP IN WALL TO BELOW SLAB; ROUTE IN PVC SLEEVE BELOW SLAB; STUB ABOVE SLAB WITH ACCESSIBLE SHUTOFF BELOW ISLAND SERVING LINE EQUIPMENT.
- PROVIDE 1/2"X1/4" REDUCING FITTING; ROUTE/CONNECT TO DROP-IN HOT WELLS*

 (4) FLOOR SINK: 2"W WTH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION
- 42) DROP-IN FROST TOP*: 1"IW WTH TRAP TO OPEN OVER LOCAL FLOOR SINK
- DROP-IN HOT WELLS*: 1"IW WTH TRAP TO OPEN OVER LOCAL FLOOR SINK

 FLOOR SINK: 4"GW WTH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION
- 45) 1/2"(115°F)HW AND CW DROPS IN WALL TO BELOW SLAB; ROUTE IN PVC SLEEVE(S) BELOW SLAB; STUB ABOVE SLAB WITH ACCESSIBLE SHUTOFFS BELOW ISLAND ADA WORK
- (6) FLOOR SINK: 3"W WTH TRAP; 1/2" PRIMER FEED TO PRIMER CONNECTION
- CONDENSATE HOOD: 1"IW WITH TRAP; ROUTE DOWN ON WALL BEHIND DISHWASHER TO OPEN OVER FLOOR SINK BELOW

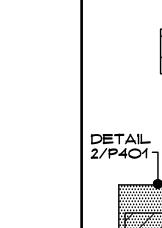




SCALE: 1/4" = 1'-0"

1ST FLOOR PLUMBING PART PLAN, AREA "A" -VICINITY OF BOYS A109/GIRLS A112/ TOILET ROOMS/SCIENCE CLASSROOM A124

P401



PROJECT NORTH NOT TO SCALE



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ENLARGED PLUMBING PART. PLANS

State Project Number: 048-0058 EA/RR/PS

Date:

JUNE 18, 2013

Scale:

AS NOTED

Drawn By:

MBQ

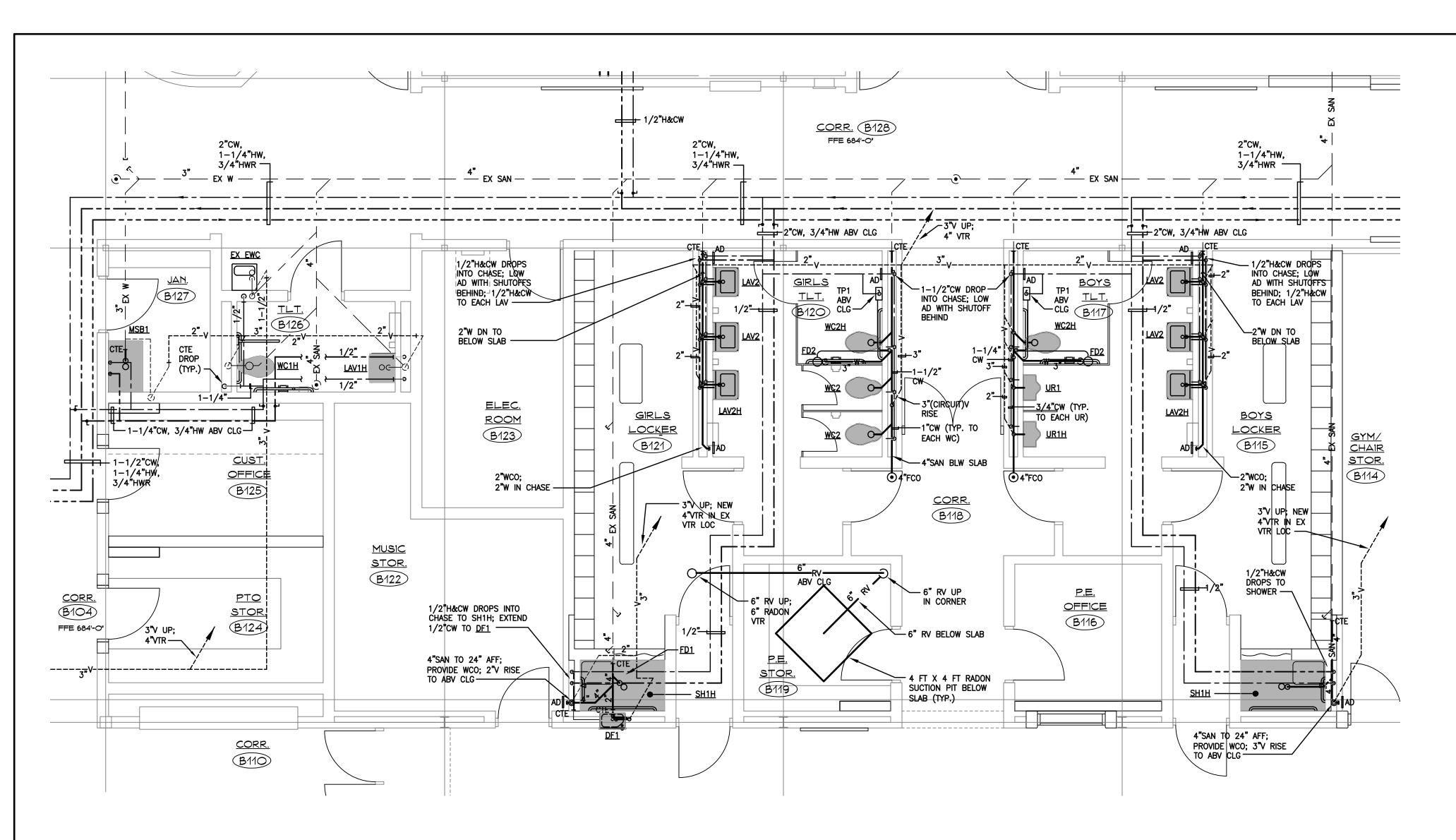
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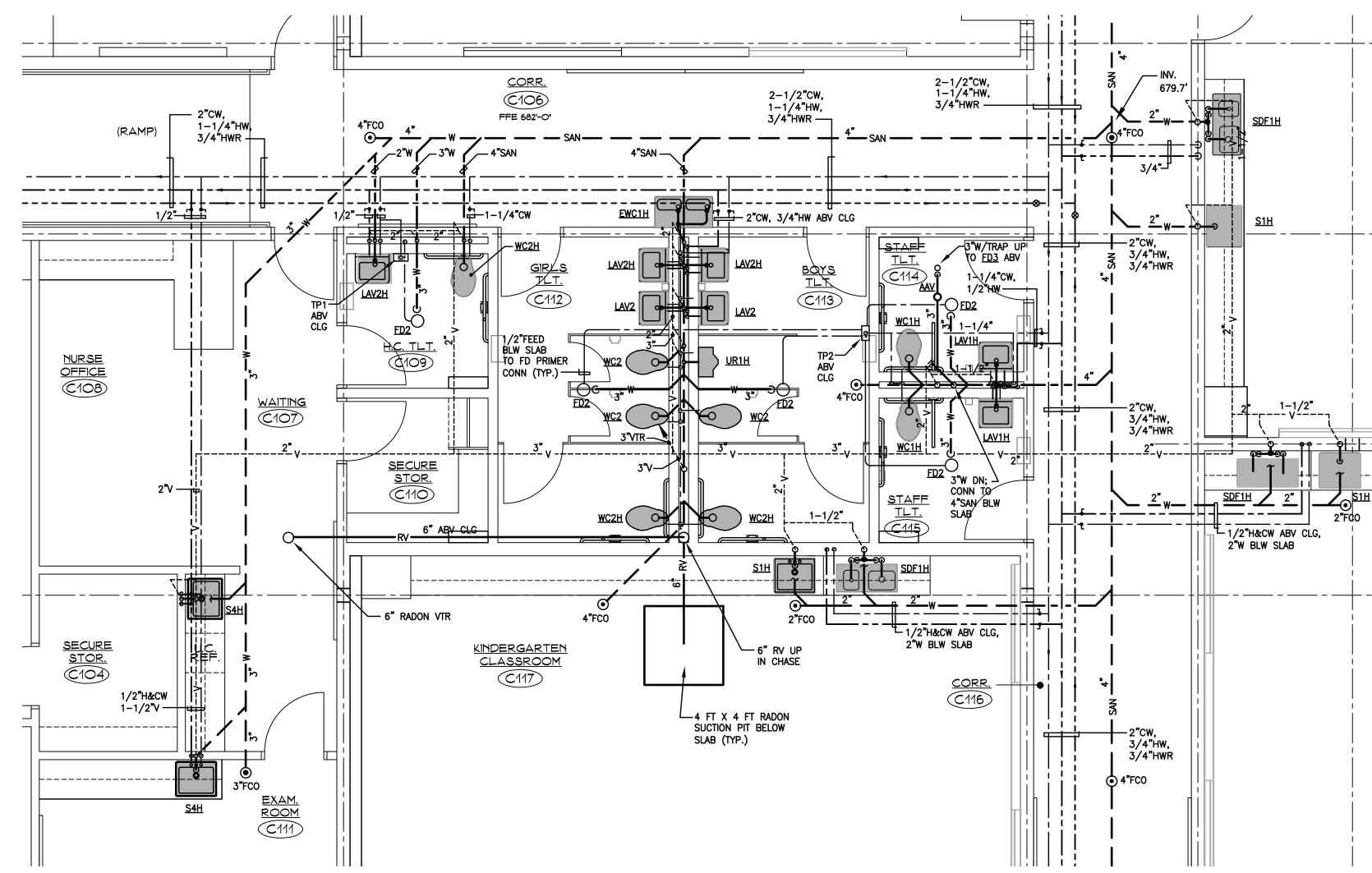
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Crystal Lake Elementary School

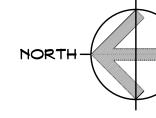
284 Sandy Beach Road Ellington, Connecticut 06029





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- 1ST FLOOR PLUMBING PART PLAN, AREA "B" - VICINITY OF BOYS B117/GIRLS B120 TOILET ROOMS SCALE: 1/4" = 1'-0"



\P402/

1ST FLOOR PLUMBING PART PLAN, AREA "C" VICINITY OF GIRLS C112/BOYS C113 TOILET ROOMS

SCALE: 1/4" = 1'-0"



DETAIL 2/P4O2

PROJECT
NORTH

NOT TO SCALE

Expansion and Renovate as New Project - PHASE 1 of 3

Crystal Lake Elementary School
284 Sandy Beach Road
Ellington, Connecticut 06029



SILVER / PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BIDDING	NOV. 26, 2	O13

ENLARGED PLUMBING

PART. PLANS

State Project Number: 048-0058 EA/RR/PS

Date:

JUNE 18, 2013

Scale:

AS NOTED

Drawn By:

MBQ

Project Number:

12.140

GENERA

- 1. THE INTENT OF THESE CONTRACT DOCUMENTS IS FOR THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. ALL SYSTEMS SHALL BE COMPLETE IN ALL RESPECTS. OPERATING, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY. FOR DESIGNATION AND THE OWNER.
- 2. THE CONTRACTOR SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS, INCLUDING PROJECT MANUAL, PLANS AND SPECIFICATIONS OF ALL TRADES BEFORE SUBMITTING BID. REFER TO SPECIFICATIONS, PROJECT MANUAL AND PLANS, INCLUDING ALL EQUIPMENT SCHEDULES FOR MECHANICAL AND ELECTRICAL INFORMATION. CONTRACTOR SHALL WALK THROUGH BUILDING PRIOR TO SUBMITTING BID.
- 3. ALL OF THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO FORM A TOTAL DESIGN PACKAGE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER TO DETERMINE WHICH TRADE CONTRACTOR IS RESPONSIBLE FOR VARIOUS PORTIONS OF THE
- 4. ALL WORK AND ACTION DEPICTED AND DESCRIBED SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
- 5. PROVIDE SUPPORT/BRACING OF EQUIPMENT AND BUILDING SERVICES FOR SEISMIC RESTRAINT AS REQUIRED BY CODE.
- 6. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
- 7. ALL EQUIPMENT, MATERIALS AND RELATED SYSTEMS COMPONENTS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE.
- 8. REPAIR AND/OR REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION
- 9. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF EQUIPMENT WITH ALL TRADES BEFORE STATING CONSTRUCTION. ANY MODIFICATIONS TO THE EQUIPMENT LAYOUT BECLURED FOR INSTALL ATION ARE TO BE DEPENDED AT NO ADDITIONAL COST TO THE OWNER.
- REQUIRED FOR INSTALLATION ARE TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

 10. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF

FIXTURES, ETC. COLORS SHALL BE COORDINATED WITH THE ARCHITECT. CONTACT ARCHITECT FOR CLARIFICATION OF MOUNTING REQUIREMENTS, IF INFORMATION IS NOT CONTAINED IN THE DRAWINGS.

- 11. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE APPLICABLE CODES IN THE ORDINANCES AND THE REGULATORY AGENCIES HAVING JURISDICTION.
- 12. ALL EQUIPMENT SHALL BE LOCATED IN ACCESSIBLE LOCATIONS. WHEN A PIECE OF EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING OR WALL THEN THE APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. THESE SHALL BE COORDINATED WITH THE ARCHITECT.
- 13. WHEN CONFLICTS OCCUR BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
- 14. CONTRACTORS SHALL COORDINATE THEIR WORK WITH ALL EQUIPMENT FURNISHED BY OWNER OR OTHER TRADES, INCLUDING REQUIRED SERVICE CONNECTIONS, RECEPTACLES, ETC. BEFORE INSTALLATION.
- 15. CONTRACTORS SHALL PROVIDE ALL REQUIRED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING WALLS OR FLOOR SLABS WITH FIRE STOPPING SEALANT WHERE REQUIRED. PENETRATIONS OF FIRE—RATED CONSTRUCTION SHALL USE LISTED COMPONENTS AND U.L.—APPROVED METHODS.
- 16. COORDINATE ALL PIPING AND CONDUITS LEAVING THE BUILDING WITH THE SITE CONTRACTOR BEFORE
- INSTALLATION.

 17. LOCATE ALL TEMPERATURE, PRESSURE AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE UP/DOWN STREAM AS RECOMMENDED BY THE MANUFACTURER FOR
- 18. PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE
- VALVES, AND OTHER CONCEALED DEVICES.

 19. ALL EQUIPMENT, PIPING, FIXTURES, ETC. SHALL BE SUPPORTED AS DETAILED, SPECIFIED AND
- REQUIRED TO PROVIDE A SECURE AND VIBRATION FREE INSTALLATION.

 20. LOCATION AND SIZES OF ALL FLOOR, WALL AND ROOF PENETRATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED.

PLUMBING GENERAL INTENT - DEMOLITION AND COORDINATION WITH EXISTING SYSTEMS

1. THIS PROJECT IS PRIMARILY AN ADDITION TO, AND COMPLETE RENOVATION OF, AN EXISTING FACILITY WHICH WILL BE MAINTAINED IN OPERATION DURING THE PROJECT. IN GENERAL, IT IS THE INTENT OF THE PLUMBING DRAWINGS TO LEAVE IN PLACE AND OPERATION ALL EXISTING PLUMBING SYSTEMS, EQUIPMENT AND PIPING UNTIL TIME OF PHASED DEMOLITION OF SAME.

- 2. BEFORE SUBMITTING HIS BID THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS UNDER WHICH THE PROJECT IS TO BE COMPLETED.
- 3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT ON HIS FAILURE TO BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS.
- 4. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW EVERY PIECE OF EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT INDICATED TO BE REMOVED SHALL BE REMOVED INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, DUCTS, CONDUITS, WIRES AND CONTROLS BACK TO THE POINT OF ORIGIN.
- 5. NO EQUIPMENT, PIPING OR CONDUIT SHALL BE ABANDONED IN PLACE UNLESS SPECIFICALLY NOTED.
 NO DEADENDS ARE ALLOWED ON SANITARY AND WASTE PIPING; REMOVE DISUSED SAN/WASTE PIPING
 BACK TO MAIN AND CAP. REMOVE DISUSED WATER PIPING BACK TO WATER MAIN, PROVIDE VALVE AND
- 6. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT AND MATERIALS IN COMPLIANCE WITH CODES AND REGULATIONS.
- 7. PROVIDE TEMPORARY CONNECTIONS AND SYSTEM MODIFICATIONS AS REQUIRED FOR CONSTRUCTION.
- 8. INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY. COORDINATE WITH GENERAL CONTRACTOR/CONSTRUCTION MANAGER FOR PHASING REQUIREMENTS.

9. FIELD VERIFY FOR EXACT LOCATIONS AND QUANTITY OF ITEMS BEING REMOVED. COORDINATE WITH

- ARCHITECTURAL PLANS FOR SCOPE AREA OF DEMOLITION AND CONSTRUCTION.

 10 GENERAL CONTRACTOR IS RESPONSIBLE FOR PATCHING REPAIRING CAPPING FTC RELATED TO
- 10. GENERAL CONTRACTOR IS RESPONSIBLE FOR PATCHING, REPAIRING, CAPPING, ETC. RELATED TO DEMOLITION AND CONSTRUCTION.

<u>PLUMBIN</u>

- 1. IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW INDIVIDUAL BRANCH PIPING TO EACH PLUMBING FIXTURE: ONLY BRANCH PIPING TO GROUPS OF FIXTURES MAY BE INDICATED. EACH AND EVERY FIXTURE SHALL BE PROPERLY PIPED TO WATER, WASTE AND VENT PIPING SYSTEMS. FOR INDIVIDUAL PIPE SIZES TO EACH FIXTURE, REFER TO THE PLUMBING FIXTURE SCHEDULE.
- PIPING LAYOUTS AS INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC: PROVIDE ADDITIONAL FITTINGS AND OFFSETS AS REQUIRED FOR COORDINATION WITH BUILDING CONSTRUCTION AND THE WORK OF OTHER TRADES.
- 3. PROVIDE TRAP PRIMER FOR EACH FLOOR DRAIN. CONNECT TRAP PRIMER TO NEAREST COLD WATER
- MAIN; PROVIDE ISOLATION VALVE AND EXTEND TO FLOOR DRAIN AS REQUIRED.
 4. PROVIDE CONDENSATE DRAINS FOR ALL COOLING COILS; PIPE BY GRAVITY TO INDIRECT WASTE OR IF GRAVITY DRAINAGE IS NOT POSSIBLE, AND NOT PROVIDED INTEGRAL TO UNIT WITH COIL, PROVIDE A CONDENSATE REMOVAL PUMP (PROVIDE UNIT PRICE FOR CP-1-SEE PLUMBING PUMP SCHEDULE),
- 5. COORDINATE MOUNTING HEIGHTS OF PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS.
- 6. PROVIDE SHUT OFF VALVES IN ALL DOMESTIC WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES TWO OR MORE FIXTURES.
- 7. ALL WATER PIPING SHALL GRADE TO LOW POINTS. PROVIDE HOSE AND DRAIN VALVES AT THE BOTTOM OF ALL WATER SYSTEM RISERS AND LOW POINTS.
- 8. UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT, IN BYPASSES AND IN LONG PIPING RUNS (100 FEET OR MORE) TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.
- 9. PROVIDE ALL PLUMBING FIXTURES AND EQUIPMENT WITH ACCESSIBLE STOPS.

WIRED TO LOCAL POWER CIRCUIT AND PIPED TO INDIRECT WASTE.

- 10. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
- 11. PROVIDE CLEANOUTS IN SANITARY AND STORM DRAINAGE SYSTEMS AT ENDS OF RUNS, AT CHANGES IN DIRECTION, NEAR THE BASE OF STACKS, EVERY 50 FEET IN HORIZONTAL RUNS AND ELSEWHERE AS
- 12. ALL CLEANOUTS SHALL BE FULL SIZE OF PIPE FOR PIPE 6 INCHES AND SMALLER AND SHALL BE 6 INCHES FOR PIPE SIZES LARGER THAN 6 INCHES.
- 13. ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- 14. PROVIDE FLEXIBLE CONNECTIONS IN ALL PIPING SYSTEMS CONNECTED TO PUMPS AND OTHER EQUIPMENT WHICH REQUIRED VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AS CLOSE TO THE EQUIPMENT AS POSSIBLE.
- 15. ALL PLUMBING, RADON, AND GAS-FIRED WATER HEATER VENT TERMINALS, AND GAS PRESSURE REGULATOR VENTS TO ATMOSPHERE SHALL BE A MINIMUM OF 25 FEET FROM ANY AIR INTAKE, DOOR OR OPERABLE WINDOW.
- 16. ALL PIPING SHALL BE SUPPORTED FROM THE TOP CHORD OF STRUCTURAL MEMBERS, NOT FROM THE BOTTOM CHORD OR INTERMEDIATE WEB MEMBERS.
- 17. THE INTENT IS TO ROUTE FIXTURE SERVICE PIPING IN NEW WALLS RATHER THAN EXISTING WALLS TO REMAIN. AT THE CONDITION OF EXISTING—TO—REMAIN WALL AND FIXTURE, EXISTING SERVICE PIPING ROUTED IN EXISTING WALL MAY BE RETAINED UNLESS VERIFIED DEFECTIVE, AND CONNECTED TO NEW WATER & VENT PIPING IMMEDIATELY AFTER PIPING LEAVES EXISTING WALL.
- 18. AT FIXTURES ON NEW WALLS, THE INTENT IS TO ROUTE WATER AND EACH WASTE/TRAP SERVICE DIRECTLY TO WALL TO RISE/DROP, MINIMIZING EXPOSED HORIZONTAL PIPING BELOW FIXTURE AND OR

FIXTURE NUMBER	DESCRIPTION	MANUFACTURER	MODEL NUMBER	NOTES	SAN/WASTE	VENT	COLD	нот
TATORE NOMBER	FLOOR-MOUNT FLUSH VALVE	AMERICAN STANDARD	MADERA FLOWISE	ADA-COMPLIANT, WHITE, 1.28 GPF, FLOOR MOUNT, ELONGATED, TOP SPUD; OLSONITE # 95	SAITY WASTE	VEIVI	OOLD	
WC1 WC1H	WATER CLOSET (1.28 GPF): ADULT USE ADA — ADULT USE	APPROVED EQUAL BY:	16-1/2" HEIGHT # 3043.001	ELONGATED OPEN FRONT PLASTIC SEAT WITH CHECK HINGE; PROVIDE SLOAN ROYAL OPTIMA 111-1.28 ES-S TMO EXPOSED SENSOR-ACTIVATED FLUSHOMETER WITH MECHANICAL OVERRIDE BUTTON, DUAL FILTERED FIXED BYPASS, INDICATOR LIGHT, EL-154 TRANSFORMER ADA INSTALLATIONS: COORD. LOCATIONS OF FLUSH VALVE COMPONENTS, INCLUDING TRIMMING LENGTH OF	4"	2"	1"	_
	FLOOR-MOUNT FLUSH VALVE WATER CLOSET (1.28 GPF):	KOHLER, CRANE, SLOAN AMERICAN STANDARD	MADERA YOUTH FLOWISE 14" HEIGHT	VACUUM TUBE (A MINIMUM 6" VAC TUBE LENGTH MUST REMAIN PER IPC) TO AVOID CONFLICT WITH CT-MANDATED REAR GRAB BAR INSTALLATIONS. REFER TO ARCH'L TOILET ELEVS. ADA-COMPLIANT, WHITE, 1.28 GPF, FLOOR MOUNT, ELONGATED, TOP SPUD; OLSONITE # 95 ELONGATED OPEN FRONT PLASTIC SEAT WITH CHECK HINGE; PROVIDE SLOAN ROYAL OPTIMA				
VC2 VC2H	AGE 12 AND UNDER USE ADA — AGE 12 AND UNDER USE	APPROVED EQUAL BY:	# 2599.001	111-1.28 ES-S TMO EXPOSED SENSOR-ACTIVATED FLUSHOMETER WITH MECHANICAL OVERRIDE BUTTON, DUAL FILTERED FIXED BYPASS, INDICATOR LIGHT, EL-154 TRANSFORMER ADA INSTALLATIONS: COORD. LOCATIONS OF FLUSH VALVE COMPONENTS, INCLUDING TRIMMING LENGTH OF VACUUM TUBE (A MINIMUM 6" VAC TUBE LENGTH MUST REMAIN PER IPC) TO AVOID CONFLICT WITH	4"	2"	1"	_
	WALL-MOUNT HIGH EFFICIENCY URINAL (0.125 GPF):	MERICAN STANDARD	WASHBROOK FLOWISE # 6590.001	CT-MANDATED REAR GRAB BAR INSTALLATIONS. REFER TO ARCH'L TOILET ELEVS. ADA-COMPLIANT, WHITE, HIGH EFFICIENCY (0.125 GPF), VITREOUS CHINA, WALL MOUNT PROVIDE SLOAN ROYAL OPTIMA 186-0.125 ES-S TMO EXPOSED SENSOR-ACTIVATED FLUSHOMETER				
R1 R1H	AGE 12 & UNDER USE ADA — AGE 12 & UNDER USE	APPROVED EQUAL BY: KOHLER, CRANE, SLOAN		WITH MECHANICAL OVERRIDE BUTTON, DUAL FILTERED FIXED BYPASS, INDICATOR LIGHT, EL-154 TRANSFORMER PROVIDE FLOOR-MOUNTED WALL SUPPORT BY WADE, JOSAM, OR JAY R. SMITH	2"	1-1/2"	3/4"	
AV1 AV1H	WALL-MOUNT LAVATORY: ADULT USE ADA - ADULT USE	AMERICAN STANDARD APPROVED EQUAL BY:	LUCERNE # 0355.012	ADA—COMPLIANT, WALL—MOUNT, VITREOUS CHINA, FOR CONCEALED ARMS; 20.5" X 18.25" O.A., FRONT OVERFLOW, SELF—DRAINING DECK AREA, BACK/SIDE SPLASH SHIELDS, FAUCET LEDGE; 4" CENTERS; PROVIDE TRAP/CLEANOUT AT REAR WALL, BRASS ANGLE STOPS, COPPER SUPPLIES; TRUE—BRO 'LAV SHIELD' ENCLOSURE. FAUCET: 0.5 GPM, SLOAN OPTIMA # ETF—80—4, ELECTRONIC, SENSOR—ACTIVATED VANDAL—RESISTANT FAUCET (SET FOR 12 SEC OPERATION); ELKAY # LKAD—174 C.P. BRASS GRID STRAINER WITH OFFSET TAILPIECE; #EL—154 120/24VAC TRANSFORMER, # BDT THERMOSTATIC MIXING VALVE. (TRANSFORMER, MIXING VALVE AND SOLENOID TO BE LOCATED WITHIN 'LAV SHIELD' ENCLOSURE). PROVIDE CONCEALED ARM	1-1/2"	1-1/2"	1/2*	1/2'
AV2	WALL-MOUNT LAVATORY: AGE 12 & UNDER USE	AMERICAN STANDARD	LUCERNE # 0355.012	SUPPORT BY WADE, JOSAM, JAY R. SMITH. IDENTICAL TO NOTES FOR FIXTURES <u>LAV1</u> AND <u>LAV1H</u> . ADDITIONAL REQUIREMENTS: FOR ALL LAV2 AND LAV2H (CHILD USE) LAVATORIES, NEATLY FIELD—TRIM TOP OF 'LAV	1-1/2"	1-1/2"	1/2"	1/2'
AV2H	ADA - AGE 12 & UNDER USE WALL-MOUNT LAVATORY:	APPROVED EQUAL BY: KOHLER, CRANE	PENLYN # 0373.050	SHIELD' ENCLOSURE TO ACCOMMODATE LOWER (THAN ADULT-USE) MOUNTING HEIGHT, AND TO PROVIDE SNUG FIT TO UNDERSIDE OF LAVATORY/WASTE WALL-MOUNT, VITREOUS CHINA, FOR CONCEALED ARMS; 18" X 15.875" O.A., FRONT OVERFLOW,	·	·	·	
		APPROVED EQUAL BY: KOHLER, CRANE	"	INTEGRAL BACKSPLASH, FAUCET LEDGE; 4" CENTERS; PROVIDE TRAP/CLEANOUT AT REAR WALL, BRASS ANGLE STOPS, COPPER SUPPLIES. PROVIDE IPS "SOFTGUARD PLUS" ASTM E84 COMPLIANT INSULATION KIT ON EXPOSED PIPING BELOW LAV. FAUCET: 0.5 GPM, SLOAN OPTIMA # ETF-80-4, ELECTRONIC, SENSOR-ACTIVATED VANDAL-RESISTANT FAUCET (SET FOR 12 SEC OPERATION); #EL-154 120/24VAC TRANSFORMER, # BDT THERMOSTATIC MIXING VALVE. ELKAY # LKAD-174 C.P. BRASS GRID STRAINER WITH TAILPIECE; C.P. BRASS TRAP WITH C.O. (TRANSFORMER, MIXING VALVE AND SOLENOID TO BE LOCATED HIGH IN ADJACENT JANITOR'S CLOSET). PROVIDE CONCEALED ARM SUPPORT BY WADE, JOSAM, JAY R. SMITH.	1-1/2"	1-1/2"	1/2"	1/2*
51H	ADA COUNTER-MOUNT SINK, ADULT USE	APPROVED EQUAL BY: JUST MFG	LUSTERTONE LRAD-2521-5-1/2"	ADA-COMPLIANT, COUNTER MOUNT 18 GA. TYPE 304 SELF-RIMMING STAINLESS STEEL SINK, 25" X 22", 3 HOLES ON 4" CENTERS, 5-1/2" DEEP SINGLE COMPARTMENT WITH OFF-CENTERED REAR DRAIN LOCATION. PROVIDE TAILPIECE WITH TRAP/CLEANOUT AT REAR WALL, ANGLE STOPS & SUPPLIES (ALL METAL); FIELD-BUILT ENCLOSURE SHALL BE PROVIDED UNDER ANOTHER DIVISION ACROSS ENTIRE WIDTH OF OPENING BELOW SINK TO CONCEAL EXPOSED SUPPLIES/WASTE. FAUCET: ELKAY #LK-1000-CR, SINGLE LEVER, 8" CTRS; PROVIDE 1.0 GPM FLOW RESTRICTING AERATOR; DRAIN: ELKAY # LK-35.	1-1/2"	1-1/2"	1/2"	1/2'
52	COUNTER-MOUNT ART SINK	ELKAY APPROVED EQUAL BY: JUST MFG	LUSTERTONE DLR-2522-10	DEEP COMPARTMENT, COUNTER MOUNT 18 GA. TYPE 304 SELF-RIMMING STAINLESS STEEL SINK, 25" X 22", 3 HOLES ON 4" CENTERS, 10" DEEP SINGLE COMPARTMENT. PROVIDE STRAINER DRAIN LK-35, 1-1/2" TAILPIECE TO WADE # 5750 HAIR AND SOLIDS INTERCEPTOR (BOTTOM ACCESS); (ALL METAL) ANGLE STOPS AND SUPPLIES. FAUCET: ELKAY # LKD-2443, GOOSENECK SPOUT, 8" CENTERS, DUAL WING BLADE HANDLES, HOSE SPRAY. PROVIDE 1.5 GPM AERATOR.	1-1/2"	1-1/2"	1/2"	1/2
53H	ADA COUNTER-MOUNT ART SINK	ELKAY APPROVED EQUAL BY: JUST MFG	LUSTERTONE LRAD-2521-5-1/2"	IDENTICAL TO NOTES FOR FIXTURE <u>\$1H</u> , EXCEPT: (1) OFFSET TAILPIECE TO REAR WALL, AND IN LIEU OF STANDARD TRAP INSTALLATION, PROVIDE WADE # 5750 HAIR AND SOLIDS INTERCEPTOR (BOTTOM ACCESS) BEHIND ENCLOSURE; (2) PROVIDE FOUR [4] HOLES ON 4" CENTERS; (3) PROVIDE FAUCET <u>WITH HOSE SPRAY</u> : ELKAY # 1001-CR)	1-1/2"	1-1/2"	1/2"	1/2
4H	ADA COUNTER-MOUNT NURSE'S SINK	ELKAY	LUSTERTONE LRAD-2521-6-1/2"	ADA-COMPLIANT, COUNTER MOUNT 18 GA. TYPE 304 SELF-RIMMING STAINLESS STEEL SINK, 25" X 22", 3 HOLES ON 4" CENTERS, 6-1/2" DEEP SINGLE COMPARTMENT WITH OFF-CENTERED REAR DRAIN LOCATION. PROVIDE LKAD-18 GRID DRAIN, ALL-METAL ANGLE STOPS & SUPPLIES; FIELD-BUILT ENCLOSURE SHALL BE PROVIDED UNDER ANOTHER DIVISION ACROSS ENTIRE WIDTH OF OPENING BELOW SINK TO CONCEAL EXPOSED SUPPLIES/WASTE.FAUCET: ELKAY # LKD-2442-BH, GOOSENECK SPOUT, 8" CENTERS, DUAL WRIST BLADE HANDLES. PROVIDE 1.0 GPM FLOW-RESTRICTING AERATOR. # LKAD-18 C.P. BRASS GRID STRAINER, 1-1/2" TAILPIECE PROVIDE DECK-MOUNTED EYEWASH ADJACENT SINK: BRADLEY MODEL S19-270C, WITH SEPARATE	1-1/2"	1-1/2"	1/2"	1/2
S5	STUDENT SCIENCE LAB SINK	APPROVED EQUAL BY: JUST MFG EPOXYN APPROVED EQUAL BY:	EPL-5	H/C SUPPLIES/STOPS AND BRADLEY S19-2000 THERMOSTATIC MIXING VALVE BEHIND ENCLOSURE. MOUNT EYEWASH BASE 13" BACK FROM FRONT FACE OF COUNTER, AND 3" OFF NEAR SINK EDGE. EPOXY RESIN DROP-IN SINK, APPROX 15"x11"x7" DEEP. PROVIDE ACID RESISTANT (A.R.) DRAIN, TAILPIECE AND TRAP, AND (2) CW-ONLY FAUCETS: CHICAGO FAUCET # 928-VR317XKCP.	2"	2"	1/2"	
S5H	ADA STUDENT SCIENCE LAB SINK	EPOXYN APPROVED EQUAL BY: KEWAUNEE	ADAL-25	ADA-COMPLIANT EPOXY RESIN DROP-IN SINK, APPROX 20"x17"x5.75" DEEP. PROVIDE A.R. DRAIN, TAILPIECE AND TRAP/CO; PROVIDE (1) CW-ONLY FAUCET: CHICAGO FAUCET # 928-VR317XKCP. MAINTAIN ALL REQUIRED ADA CLEARANCES AND INSULATE ALL EXPOSED PIPING BELOW SINK.	2"	2"	1/2"	
66H	ADA TEACHER SCIENCE LAB SINK	EPOXYN APPROVED EQUAL BY: KEWAUNEE	ADAL-25	ADA-COMPLIANT EPOXY RESIN DROP-IN SINK. APPROX 20"x17"x5.75" DEEP. PROVIDE A.R. DRAIN, TAILPIECE AND TRAP/CO; PROVIDE (1) HW/CW FAUCET: CHICAGO FAUCET # 930-VR317XKCP. MAINTAIN ALL REQUIRED ADA CLEARANCES AND INSULATE ALL EXPOSED PIPING BELOW SINK.	2"	2"	1/2"	1/2
57	DEEP SCIENCE LAB SINK	EPOXYN APPROVED EQUAL BY: KEWAUNEE	EPL-53	DEEP COMPARTMENT EPOXY RESIN DROP-IN UTILITY SINK, APPROX. 26"x20"x17.5" DEEP. PROVIDE ACID RESISTANT DRAIN, TAILPIECE AND TRAP/CO; PROVIDE (1) HW/CW FAUCET: CHICAGO FAUCET # 930-VR317XKCP.	2"	2"	1/2"	1/2
SDF1H	ADA CLASSROOM SINK/FOUNTAIN	ELKAY	LUSTERTONE M-DRKAD-3717-C, (MODIFIED)	ADA-COMPLIANT, COUNTER MOUNT SINK/FOUNTAIN PACKAGE, 18 GA. TYPE 304 STAINLESS STEEL, 37.25" X 17" OVERALL, WITH 3-5/8" DEEP FOUNTAIN BOWL, AND 5-1/2" SINK BOWL, AND MODIFIED AS FOLLOWS: (1) WITH OFF-CENTERED REAR DRAIN ON SINK (2) FOUNTAIN BUBBLER ON SINK SIDE OF FOUNTAIN BASIN; (3) INCLUDING REMOTE CONTROLLED NO LEAD FLEXI-GUARD BUBBLER MODEL LKR1141A (BUBBLER WITH PUSH BUTTON COMBINATION; PUSHBUTTON SHALL BE LOCATED IN FRONT FACE OF COUNTER). DIRECTLY IN FRONT OF BUBBLER; 3 SINK FAUCET HOLES ON 4" CENTERS; (1) SLOTTED HOLE FOR FOUNTAIN BUBBLER;	(2) 1-1/2"	(2) 1-1/2"	1/2" 1/2"CW	1/2
		APPROVED EQUAL BY: JUST MFG		PACKAGE SHALL INCLUDE FAUCET AND BUBBLER, DUO-STRAINER SINK DRAIN, AND GRID STRAINER FOUNTAIN DRAIN; PROVIDE TRAP WITH CLEANOUT FOR EACH DRAIN; IF COLLECTION OF WASTES IS INDICATED, COLLECT ON REAR WALL. FIELD-BUILT ENCLOSURE SHALL BE PROVIDED UNDER ANOTHER DIVISION ACROSS ENTIRE WIDTH OF OPENING BELOW SINK TO CONCEAL EXPOSED SUPPLIES/WASTE. PROVIDE ANGLE STOPS & SUPPLIES (ALL METAL), AND 1.0 GPM FLOW RESTRICTING AERATOR OR FITTING ON SINK FAUCET.	, ,,2	, ,,=	. F 1/2"H&	OUNTAI
SH1H	ADA ROLL-IN SHOWER NOTE: ENCLOSURE PROVIDED UNDER ANOTHER DIVISION. COORDINATE DRAIN AND CONTROL ROUGH-IN REQUIRE- MENTS WITH ALL OTHER TRADES. REFER TO ARCH'L DWGS FOR ENCLOSURE.	DRAIN: WADE APPROVED EQUAL BY: JOSAM, JAY R. SMITH CONTROLS: SYMMONS APPROVED EQUAL BY:	DRAIN: 1002STD5-175 CONTROLS: 1-117-FS-B30-X-2.0	PROVIDE WADE SHOWER DRAIN WITH 5" STRAINER AND SECURITY SCREWS. PROVIDE 'SYMMONS' PRESSURE—BALANCING MIXING VALVE, 2.0 GPM; #FS (EF-100) HANDHELD SHOWER, 2.0 GPM FLOW CONTROL, WITH SWIVEL FITTING, 60" FLEXIBLE S.S. HOSE WITH IN-LINE VACUUM BREAKER, 30" SLIDE GUIDE.	2"	2"	1/2"	1/2"
EEW1H	ADA EMERGENCY EYEWASH	MOEN COMM., AM. STD. BRADLEY APPROVED EQUAL BY:	S19 220BF WITH WRAP—AROUND SKIRT	ADA—COMPLIANT, WITH 10" DIAMETER STAINLESS STEEL BOWL, CHROME—PLATED BRASS TWIN SPRAYHEAD ASSEMBLY WITH PROTECTIVE COVERS. PROVIDE THERMOSTATIC MIXING VALVE TMV2 FOR EMERGENCY SHOWER/EYEWASH, LOCATED ADJACENT IN LOCKING RECESSED STAINLESS STEEL WALL CABINET. TMV—2: BRADLEY # S19—2000, MIN. FLOW RATE 1.5 GPM; 4.5 GPM AT 10 PSI DROP, COLD WATER BYPASS, POSITIVE SHUTOFF ON HOT SUPPLY WHEN COLD SUPPLY IS LOST; LIQUID—FILLED T'STAT, DIAL THERMOMETER, INTEGRAL INLET STRAINER/STOPS; FACTORY—PIPED AND TESTED. SET DISCHARGE TO 85'F. PROVIDE BRADLEY #S19—320D FLOW SWITCH ALARM ON TEMPERED SUPPLY TO EMERGENCY FIXTURE: LOCATE FLOW SWITCH SENSOR AT HIGH POINT OF TEMPERED SUPPLY PIPING, ORIENTED PER MFR'S REQ'MTS.	1-1/2" (EYE- WASH BOWL)	SEE DWGS	1/2"Ho MIXING 1/2 (TEPID- TO EMER	: VALVI 2" –85°F)
MSB1	BASIN	HAWS, GUARDIAN FIAT APPROVED EQUAL BY: SWANSTONE,	MSB-3624	LOCATE HORN/STROBE HIGH ON WALL BEHIND EYEWASH, AND CENTERED ON SAME. MOLDED STONE MOP SERVICE BASIN, 36"x24"x10"H, WITH MFR'S: VANDALPROOF DRAIN, 3" QDC DRAIN CONN., 832 AA HOSE AND HOSE BRACKET, 889 CC MOP BRACKET; E-88-AA STAINLESS STEEL BUMPER GUARD. FAUCET: T&S BRASS MODEL B0665-BSTP (INTEGRAL STOPS, VACUUM BREAKER, PAIL HOOK, HOSE THREAD, 8" CENTERS); PROVIDE	3"	1-1/2"	1/2"	1/2
SS1	SERVICE SINK	AMERICAN STANDARD APPROVED EQUAL BY: KOHLER, CRANE	AKRON 7695.000	1.0 GPM FLOW CONTROL FITTING ON FAUCET. ENAMELED CAST IRON SERVICE SINK WITH WALL HANGER, RIM GUARD, PLAIN BACK, 24" X 20.5"; PROVIDE WITH: AMERICAN STANDARD #7798.030 CAST IRON P-TRAP AND DRAIN STRAINER FOR 3" IRON PIPE; CHICAGO FAUCET # 897-RCF SERVICE SINK WITH WALL BRACE, VACUUM BREAKER, AND HOSE THREAD OUTLET, CENTERED ON WALL ABOVE SINK. PROVIDE 1/2" METAL SUPPLIES AND STOPS.	3"	SEE DWGS	1/2"	1/2
EWC1H	ADA BI-LEVEL WATER COOLER	HALSEY TAYLOR APPROVED EQUAL BY: ELKAY, OASIS	HVRGRN8BL WITH APRON	ADA-COMPLIANT, GREENSPEC LISTED, NSF/ANSI 61-ANNEX G CERTIFIED, BI-LEVEL STAINLESS STEEL WATER COOLER. WITH ONE-PIECE VANDAL-RESISTANT BUBBLERS, HANGER BRACKET FOR SURFACE MOUNTING. RATINGS: 8.0 GPH OF 50°F DRINKING WATER WITH 90°F AMBIENT AIR TEMP. AND 80°F ENTERING WATER TEMP.; 115V/1 PHASE, 260 WATTS, 2.8 FLA. PROVIDE	(2) 1-1/2"	1-1/2"	(2) 1/2"	
EWC2H	ADA WATER COOLER WITH RECESSED CHILLER	HALSEY TAYLOR APPROVED EQUAL BY:	OVL-II-ER-GRN-VR	MANUFACTURER'S CANE TOUCH APRON ACCESSORY FOR UPPER UNIT. ADA—COMPLIANT, GREENSPEC LISTED, NSF/ANSI 61—ANNEX G CERTIFIED, STAINLESS STEEL WATER COOLER. WITH STAINLESS STEEL WALL GRILLE/ WALL PLATE; MOUNTING FRAME; AND RECESSED CHILLER UNIT. RATINGS: 7.5 GPH OF 50°F DRINKING WATER WITH 90°F AMBIENT AIR TEMP. AND	1-1/2"	1-1/2"	1/2"	
DF1	DRINKING FOUNTAIN	ELKAY, OASIS HALSEY TAYLOR APPROVED EQUAL BY:	8880-VR	80°F ENTERING WATER TEMP.; 115V/1 PHASE, 260 WATTS, 2.8 FLA. FULLY RECESSED DRINKING FOUNTAIN, NSF/ANSI 61 AND 372 CERTIFIED, STAINLESS STEEL WATER COOLER. WITH ONE—PIECE VANDAL—RESISTANT BUBBLER, MOUNTING FRAME AUTOMATIC STREAM HEIGHT REGULATOR, FRONT PUSHBUTTON ACTUATION; WITH VANDAL	1-1/2"	1-1/2"	1/2"	
DW*			REFER TO ARCH'L	RESISTANT KIT, EASY FLEX BUBBLER. PROVIDE HW (WITH SEPARATE SHUTOFF) AND DRAIN HOSE SERVICES FROM ADJACENT SINK PROVIDE HW PRESSURE REDUCER PER MFR'S REQ'MTS, AND BACKFLOW PREVENTION PER CODE.	1/2"			1/2
NFWH	NON-FREEZE WALL HYDRANT	WOODFORD APPROVED EQUAL BY: WADE, ZURN	B65	KEY-OPERATED, ANTI-SIPHON VACUUM BREAKER, NON-FREEZE WALL HYDRANT			3/4"	

REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR MOUNTING HEIGHTS AND CLEARANCE REQUIREMENTS.

FOR EACH ADA LAY/SINK: PROVIDE REAR OFFSET DRAIN AND ROUTE PIPING AS REQUIRED TO CONCEAL ALL PIPING WITHIN PREFABRICATED UNDER SINK/LAV ENCLOSURE. REFER TO ARCH'L MILLWORK ELEVATIONS.

NOTE: FIXTURES, APPLIANCES AND EQUIPMENT MARKED ON THE PLUMBING DRAWINGS WITH AN ASTERISK (*) ARE TO BE FURNISHED UNDER ANOTHER SECTION OR BY OWNER. PLUMBING CONTRACTOR SHALL ROUGH PLUMBING SERVICES FOR, INSTALL, AND MAKE FINAL PLUMBING CONNECTIONS TO SUCH FIXTURES, APPLIANCES, AND EQUIPMENT. FOR KITCHEN EQUIPMENT PLUMBING PROVISIONS AND CONNECTIONS, REFER TO DRAWING P401.

SILVER / PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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Revision:	Description:	Date: Re	vised By:
	ISSUED FOR BIDDING	NOV. 26, 2013	

GAS-FIRED DOMESTIC WATER HEATER SCHEDULE						
EQUIPMENT NUMBER	MANUFACTURER	MODEL NUMBER	NOTES			
GWH1	A.O.SMITH (1)	BTH-199 (CYCLONE Xi)	ASHRAE/IESNA 90.1/1999 COMPLIANT; SCAQMD APPROVED (LOW NOx); U.L. LISTED; NSF STANDARD 5-CERTIFIED; DIRECT VENT, UP TO 95% THERMALLY EFFICIENT (MINIMUM), GAS-FIRED CONDENSING COMMERCIAL STORAGE TYPE WATER HEATER WITH GLASS-LINED 100 GALLON TANK WITH POWERED ANODES. STEEL JACKET WITH BAKED POWDER COAT FINISH, WITH HIGH DENSITY FOAM INSULATION. CONTROLS: INTEGRATED SOLID STATE TEMPERATURE AND IGNITION DEVICE WITH INTEGRAL DIAGNOSTICS, GRAPHIC USER INTERFACE, FAULT HISTORY DISPLAY, AND SHALL HAVE DIGITAL TEMPERATURE READOUT; FACTORY-INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE. PROVIDE HIGH LIMIT SAFETY SHUTOFF (MANUAL RESET), AND LOW WATER CUTOFF. PROVIDE DIRECT VENTING SYSTEM, USING 4" PVC FOR INTAKE, AND 4" CPVC FOR EXHAUST VENT, COMPLETE WITH MANUFACTURER'S CONCENTRIC VENT TERMINATION ASSEMBLY. PROVIDE MANUFACTURER'S CONDENSATE NEUTRALIZATION KIT. RATINGS: 199 MBH INPUT (LP GAS), 230 GPH RECOVERY AT 100 'F RISE. INSTALL HEATER IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. HEATER SHALL BE MOUNTED ON 6" HIGH CONCRETE HOUSEKEEPING PAD, AND SHALL BE SEISMICALLY RESTRAINED. THE CONTRACTOR SHALL HAVE THE HEATER INSTALLATION INSPECTED BY THE STATE BOILER INSPECTOR. THE SIGNED CERTIFICATE SHALL BE FORWARDED TO THE ENGINEER. PROVIDE FACTORY START-UP AND 3 HOURS OF OPERATION/CONTROL TRAINING TO OWNER'S STAFF. SET TANK THERMOSTAT FOR 140 DEGREES F. PROVIDE MANUFACTURER'S EXTENDED 5-YEAR WARRANTY.			
GWH2	RINNAI (2)	RV65iLP WITH BATTERY— OPERATED REMOTE CONTROLLER MCC—91—2	TEMPERATURE—CONTROLLED, ENERGY STAR QUALIFIED, FORCED COMBUSTION/DIRECT VENT, LOW NOx TANKLESS GAS—FIRED WALL—MOUNTED WATER HEATER; MIN/MAX GAS INPUT: 10.3 MBH/150 MBH; MIN/MAX FLOW RATES: 0.26 GPM/6.6 GPM; MIN ACTIVATION FLOW RATE: 0.4 GPM; 3/4" WATER AND GAS CONNS; WATER FLOW SENSOR, ELECTRONIC WATER CONTROL DEVICE AND FIXED BYPASS; DIRECT ELECTRONIC IGNITION; SET DISCHARGE TEMPERATURE THRU REMOTE CONTROLLER TO 140 DEGF; PROVIDE TEMPERATURE GAUGES ON INLET AND DISCHARGE. ELECTRICAL: HEATER: 120V—1 PHASE, 76 WATTS; CONTROLLER: 12VDC. PROVIDE ASME—RATED T&P RELIEF VALVE ON DISCHARGE (PRESSURE RELIEF ONLY IS FACTORY—FURNISHED; T&P RELIEF IS REQUIRED PER STATE INSPECTORS.) PROVIDE COMBUSTION/EXHAUST THROUGH ROOF WITH HEATER MFR—APPROVED VENTING KIT. PROVIDE MFR'S CONDENSATE COLLECTOR, PIPED TO OPEN OVER LOCAL MOP BASIN WITH AIR GAP PER CODE.			

(1)	OR APPROVED EQUA	AL BY PVI INDUSTRIES,	INC., BOCK WATER HEATER	S, INC. (2) OF	R APPROVED EQUAL BY TAKAGI,

WATER HEATER SYSTEM ACCESSORY SCHEDULE						
EQUIPMENT NUMBER	MANUFACTURER	MODEL NUMBER	NOTES			
TMV1 (1)	LAWLER	802	HIGH-LOW THERMOSTATIC MIXING VALVE; RATED 39 GPM AT 10 PSI DROP; 2.0 GPM MIN. FLOW REQUIRED (IN RECIRCULATING HW SYSTEM); 1" INLETS, 1-1/4" OUTLET, ADJUSTABLE LOCATIONS (ROTATABLE). PROTECTS AGAINST HOT/COLD SUPPLY AND T'STAT FAILURE. SET DISCHARGE FOR 115°F			
TMV2 (1)	BRADLEY	S19-2000-RS	WITH LOCKING RECESS-MOUNTED STAINLESS STEEL CABINET. PROVIDE (1/2") INLET AND DISCHARGE SHUTOFFS, AND DISCHARGE THERMOMETER, IF NOT FURNISHED PRE-PIPED WITH TMV. REFER TO EMERGENCY EYEWASH ("EEW1H") FIXTURE IN PLUMBING FIXTURE SCHEDULE, THIS SHEET			
TMV* (FOR KITCHEN EMERGENCY FIXTURE)	REFER TO FOODSERVICE DWGS/SPECS	REFER TO FOODSERVICE DWGS/SPECS	THERMOSTATIC MIXING VALVE TMV* IS TO BE FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR WITH FOOD SERVICE ITEM #15, KITCHEN EMERGENCY EYEWASH/SHOWER*. PROVIDE INLET CHECK VALVES AND SHUTOFFS, DISCHARGE SHUTOFF. PROVIDE DISCHARGE THERMOMETER, IF NOT FURNISHED PRE-PIPED WITH TMV*			
ET1	AMTROL	ST-12-C	THERMAL EXPANSION TANK; 6.4 GALLONS TOTAL VOLUME, 0.41 MAX. ACCEPTANCE FACTOR; 3/4" NPT CONNECTION			
(1) OR APPROVED E	QUAL BY HOLBY, LI	EONARD. MUST BE RA	TED FOR PROPER OPERATION AT MIN. FIXTURE FLOW RATE, AND HAVE HOT/COLD SUPPLY & T'STAT FAILURE PROTECTION			

	PLUMBING PUMP SCHEDULE					
EQUIPMENT NUMBER	MANUFACTURER	MODEL NUMBER	NOTES			
HWRP1	BELL & GOSSETT (1)	PL-36B	ALL-BRONZE DOMESTIC HOT WATER RECIRCULATING PUMP: RATED 6 GPM AT 33 FT HEAD; 115 VOLTS/1 PH, 1/6 HP; 3300 RPM; 3/4"NPT FLANGE. PUMP SHALL OPERATE VIA AQUASTAT CONTROLLED THROUGH 7 DAY/24 HOUR TIMECLOCK. TIME CLOCK: INTERMATIC, 120V/1 PH SPDT SWITCH, 24 HR/365 DAY PROGRAMMABLE, NON-VOLATILE MEMORY TO MAINTAIN ALL PROGRAMMED SWITCHING TIMES FOR THE LIFE OF THE TIME SWITCH; CASE: HARD DRAWN STEEL WITH PERMANENTLY ATTACHED HINGED DOOR WITH LOCKABLE HASP. LOCATE THE TIME CLOCK WITH OTHER CONTROLS IN ATTIC MECHANICAL ROOM. COORDINATING EXACT LOCATION WITH ALL OTHER TRADES.			
SEP1 (FOR SPRINKLER DRAINDOWN AND STORM WATER DRAINAGE)	GRUNDFOS (PUMP) HYDROMATIC (BALANCE OF PKG.) (OR APPROVED EQUAL BY LITTLE GIANT OR ZOELLER)		SIMPLEX SUBMERSIBLE SUMP PUMP PACKAGE: PUMP: GRUNDFOS MODEL AP12; MOTOR: LIQUID COOLED, STAINLESS STEEL, CANNED ROTOR DESIGN, WITH AUTO RESET THERMAL PROTECTION; 1/2 HP, 115V/1 PH, WITH 10 FT POWER CORD; AUTOMATIC FLOAT SWITCH OPERATION VIA PIGGYBACK PLUG; RATED 10 GPM AT 30 TDH; HANDLES 7/16" SOLIDS. BASIN: HYDROMATIC (TOPP, INC) 18"Ø X 30" DEEP POLYETHYLENE BASIN WITH RECESS ROLL VAPORTIGHT COVER: 4" SIDE INLET HUB (SHIPPED LOOSE), 1-1/2" VENT, 1-1/2" DISCHARGE (WITH SWING CHECK VALVE), AND ELECTRICAL THROUGH COVER. PROVIDE HYDROMATIC Q-ALERT HIGH WATER ALARM PACKAGE WITH AUXILIARY SET OF DRY CONTACTS FOR CONNECTION INTO BUILDING FIRE ALARM CONTROL PANEL. PROVIDE MFR'S STARTUP/ADJUSTMENT.			

			DRAINAGE SPECIALTIES		
EQUIPMENT NUMBER	MANUFACTURER	MODEL NUMBER	ES		
RD1 (SINGLE FUNCTION USE)	WADE (1)	3000-39-42-53-5	COATED CAST IRON ROOF DRAIN WITH BOTTOM OUTLET, FLANGE, FLASHING RING, WITH GRAVEL STOP, CAST IRON DOME, DECK CLAMP, GALVANIZED IRON PARTS; VANDAL PROOF. OUTLET SIZE AT EACH NEW RD LOCATION AS INDICATED ON THE PLANS		
RD2 (BI-FUNCTIONAL USE)	FROET	100-C-DC-OFS	BI-FUNCTIONAL COATED CAST IRON ROOF DRAIN; APPROXIMATELY 12" DIAMETER, 5" HIGH, SECURED, CAST IRON STANDARD DOME; 6" HIGH OVERFLOW INLET WITH VANDAL RESISTANT SECURED STRAINER; DECK CLAMP, PRIMARY AND EMERGENCY OUTLET SIZES SHALL BE IDENTICAL; OUTLET SIZE AT EACH RD1 LOCATION AS INDICATED ON THE PLANS		
FD1	WADE (1)	1102STD6	FLOOR DRAIN, 6"Ø NICKEL BRONZE STRAINER (ADJUSTABLE), 2" BOTTOM OUTLET; WITH FLANGE, REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PRIMER TAP, VANDALPROOF SCREWS		
FD2	WADE (1)	1103STD6	FLOOR DRAIN, 6"Ø NICKEL BRONZE STRAINER (ADJUSTABLE), 3" BOTTOM OUTLET; WITH FLANGE, REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PRIMER TAP, VANDALPROOF SCREWS		
FD3	WADE (1)	1103ER7	FLOOR DRAIN, 7"0 NICKEL BRONZE (ADJUSTABLE) STRAINER WITH EXTENDED RIM, 3" BOTTOM OUTLET; WITH FLANGE, REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PRIMER TAP, VANDALPROOF SCREWS		
FD4	WADE (1)	110 <u>#</u> ER7	FLOOR DRAIN, 7"Ø NICKEL BRONZE (ADJUSTABLE) STRAINER WITH EXTENDED RIM, BOTTOM OUTLET (<u>VIF AND MATCH EX. PIPE SIZE</u>); WITH FLANGE, REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PRIMER TAP, VANDALPROOF SCREWS		
FS1	WADE (1)	9142-15-179-6	FLOOR SINK, 12" X 12" WITH 8" DEEP SUMP, CAST IRON WITH A.R.E. INTERIOR, ALUMINUM DOME STRAINER, HINGED NICKEL BRONZE HALF-GRATE, 2" BOTTOM OUTLET; WITH SEEPAGE FLANGE, 1/2" PRIMER TAP, SECURITY SCREWS		
FS2	WADE (1)	9143-15-179-6	FLOOR SINK, 12" X 12" WITH 8" DEEP SUMP, CAST IRON WITH A.R.E. INTERIOR, ALUMINUM DOME STRAINER, HINGED NICKEL BRONZE HALF-GRATE, 3" BOTTOM OUTLET; WITH SEEPAGE FLANGE, 1/2" PRIMER TAP, SECURITY SCREWS		
AD1	WADE (1)	164 <u>#</u> -Y-39-(YS)	1640 SERIES, PAINTED CAST IRON DRAIN WITH ANSI LD LOAD CLASS (LIGHT DUTY-UNDER 2000 LBS) ROUND TOP WITH PERFORATED HINGED GRATE, BOTTOM OUTLET (VIF & MATCH EX. PIPE SIZE); GALV. IRON PARTS; PROVIDE SIDE OUTLET ELBOW (-YS) IF REQ'D BY VERIFIED FIELD CONDITIONS TO FACILITATE CONN. TO EX. PIPE.		
TP1	PPP, INC. (1)	PR-500 PRIME-RITE	ASSE 1018-CERTIFIED TRAP PRIMER VALVE FOR SINGLE TRAP SERVICE, MOUNT A MINIMUM 12" ABOVE FINISHED FLOOR. WHERE LOCATED RECESSED IN WALL OR CHASE, PROVIDE WALL ACCESS DOOR, FIRE-RATING PER WALL RATING REQUIREMENTS		
TP2	PPP, INC. (1)	PR-500 PRIME- RITE WITH DU-U	ASSE 1018—CERTIFIED TRAP PRIMER VALVE FOR UP TO 4 TRAPS, WITH DU—U DISTRIBUTION UNIT. MOUNT A MINIMUM 12" ABOVE FINISHED FLOOR. PROVIDE SEPARATE 1/2" PRIMER FEED FROM DISTRIBUTION UNIT TO EACH TRAP SERVED. WHERE LOCATED RECESSED IN WALL OR CHASE, PROVIDE WALL ACCESS DOOR, FIRE—RATING PER WALL RATING REQ'MTS		
ТР3	PPP, INC. (1)	MP-500-115V ELECTRONIC PRIMING ASSEMBLY	"MINI-PRIME" ASSE 1044-CERTIFIED AUTOMATIC ELECTRONIC TRAP PRIMING ASSEMBLY FOR 1-4 TRAP SERVICE, WITH 1" AIR GAP. 115 VOLT UL LISTED SOLENOID VALVE, 6-FT ELECTRICAL CORD, 1/2" INLET AND OUTLET. COLUMN-MOUNT USING STEEL SUPPORT BRACKETS.		
TP4	PPP, INC. (1)	MP-500-115V ELECTRONIC PRIMING ASSEMBLY W/DU-U	"MINI-PRIME" ASSE 1044-CERTIFIED AUTOMATIC ELECTRONIC TRAP PRIMING ASSEMBLY FOR 1-4 TRAP SERVICE, WITH 1" AIR GAP, AND 'DU' SERIES DISTRIBUTION UNITS (ONE FOR EACH TRAP SERVED). 115 VOLT UL LISTED SOLENOID VALVE, 6-FT ELEC. CORD, 1/2" INLET/OUTLETS. COLUMN-MOUNT USING STEEL BRACKETS.		

(1) OR APPROVED EQUAL BY ZURN SPEC. DRAINAGE OPERATION, WADE, JAY R. SMITH, OR JOSAM MANUFACTURING CO., INC.

EXISTING PIPING/EQUIPMENT	
TO BE REMOVED SANITARY OR WASTE BELOW SLAB SOIL OR WASTE ABOVE GRADE/SLAB GREASE WASTE PIPING CDV———————————————————————————————————	BALANCING VALVE CHECK VALVE PRESSURE REDUCING VALVE THERMOSTATIC MIXING VALVE T & P RELIEF VALVE PRESSURE GAUGE BACKFLOW PREVENTER UNION STRAINER BUTTERFLY VALVE WATER HAMMER ARRESTOR THERMOMETER EXPOSED OR WALL CLEANOUT FLOOR CLEANOUT FLOOR DRAIN ROOF DRAIN WALL HYDRANT OR HOSE BIB MANUAL AIR VENT CIRCULATIING PUMP CONNECT TO EXISTING TRAP PRIMER VALVE FOR MULTIPLE TRAP SERVICE

AAV	AIR ADMITTANCE VALVE	LB.	POUND
ABV	ABOVE	L.F.	LINEAL FEET
AD	ACCESS DOOR	LP	LIQUID PROPANE
AFF	ABOVE FINISHED FLOOR	LVG.	LEAVING
AFG	ABOVE FINISHED (LOCAL) GRADE	MAX	MAXIMUM
BLW	BELOW	MIN	MINIMUM
С	CONDENSATE	MBH	BTU PER HOUR (THOUSANDS)
CLG	CEILING	NFWH	NON-FREEZE WALL HYDRANT
CO	CLEANOUT	NTS	NOT TO SCALE
CONN	CONNECT, CONNECTION	OST	OVERFLOW (EMERGENCY) STORM
C.P.	CHROME PLATED	PH	PHASE
CTE	CONNECT TO EXISTING	PRV	PRESSURE REDUCING VALVE
CW	COLD WATER	RD	ROOF DRAIN
DF	DRINKING FOUNTAIN	RPZ	REDUCED PRESSURE ZONE
EWC	ELECTRIC WATER COOLER		BACKFLOW PREVENTER
EXH	EXHAUST (GAS WATER HEATER)	RTU	ROOF TOP UNIT
FC0	FLOOR CLEANOUT	RWL	VERTICAL RAINWATER CONDUCTO
FD	FLOOR DRAIN	S, SAN	SANITARY WASTE
FS	FLOOR SINK	ST	STORM
FT	FEET	START.	STARTING
G	GAS	SWS	SOLAR WATER SUPPLY
GPF	GALLONS PER FLUSH	SWR	SOLAR WATER RETURN
GPH	GALLONS PER HOUR	TD	TRENCH DRAIN
GPM	GALLONS PER MINUTE	TP	TRAP PRIMER
GT	GREASE TRAP	TW	TEPID WATER (85 DEG F)
GW	GREASE WASTE	UR	URINAL
HCHB	HOT/COLD HOSE BIBB	V	VENT
HD	HEAD	VTR 	VENT THRU ROOF
HP	HORSEPOWER	W	WASTE
HW	HOT WATER	WC	WATER CLOSET
HWR	HOT WATER RECIRCULATING	WCO	WALL CLEAN OUT
I.W.	INDIRECT WASTE	WHA	WATER HAMMER ARRESTOR
LAV	LAVATORY	YC0	YARD CLEANOUT

12.140

PLUMBING ABBREVIATIONS

Expansion and Renovate as New Project - PHASE 1 of 3

Ellington, Connecticut 06029

Crystal Lake Elementary School
284 Sandy Beach Road

PLUMBING LEGENDS, NOTES, SCHEDULES
State Project Number: 048-0058 EA/RR/PS

Date:

JUNE 18, 2013

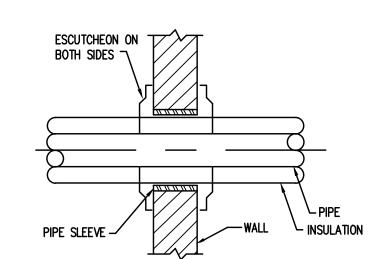
Scale:

NOT TO SCALE

Drawn By:

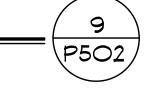
MBQ

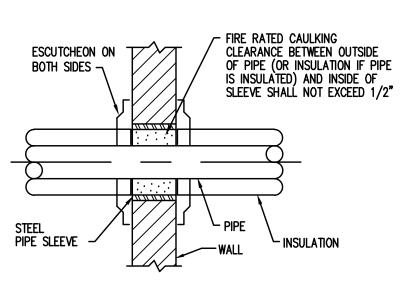
Project Number:



PIPE PENETRATION DETAIL NON-RATED WALL

NOT TO SCALE





PIPE PENETRATION DETAIL FIRE RATED WALL

NOT TO SCALE



BOLT (TYPICAL)

\P5O2

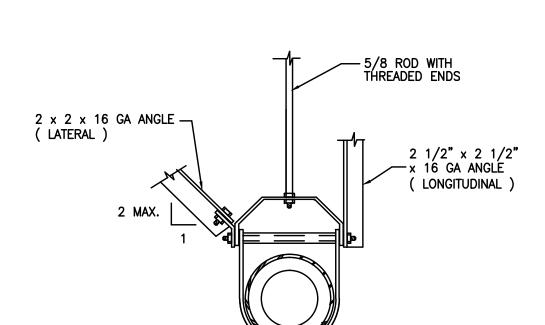
BRACING OR VERTICAL SUPPORT

CONNECTION TO CONCRETE

7 1/2"

1/2" BOLT-

NOT TO SCALE



1. PROVIDE LONGITUDINAL AND LATERAL BRACING ON PIPING 2 1/2" AND GREATER, GAS PIPING 1" I.D. AND GREATER AND PIPING IN BOILER AND MECHANICAL ROOMS 1 1/4" AND GREATER, WHERE SUSPENDED 12" OR MORE FROM SUPPORTING STRUCTURE.

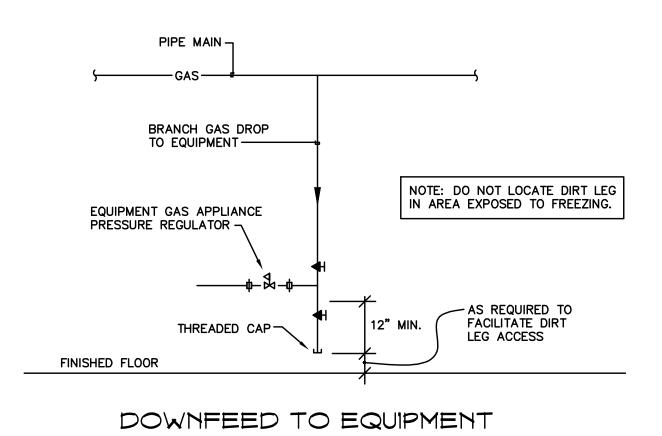
2. PROVIDE SIMILAR BRACING ON ALL DUCTWORK WITH CROSS—SECTIONAL AREA OF 6 SF OR GREATER OR DIAMETER OF 28 IN. OR GREATER WHERE SUSPENDED 12" OR MORE FROM SUPORTING STRUCTURE.

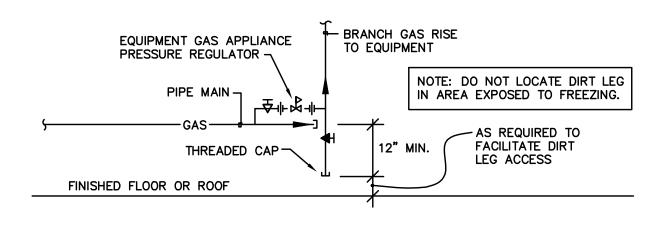
3. MAKE END CONNECTIONS TO EXISTING STRUCTURAL STEEL WITH 1/2" BOLTS OR TO CONCRETE DECK PER CONNECTION TO CONCRETE DETAIL ABOVE.

PIPE SUPPORT DETAIL

NOT TO SCALE

6
P502



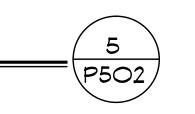


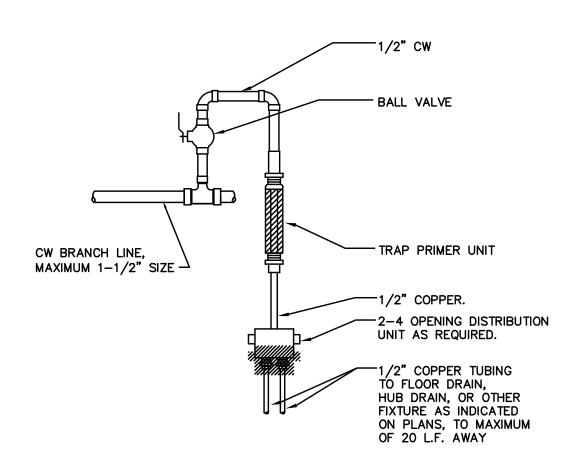
UPFEED TO EQUIPMENT

TYPICAL

DIRT LEG DETAILS

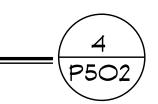
NOT TO SCALE

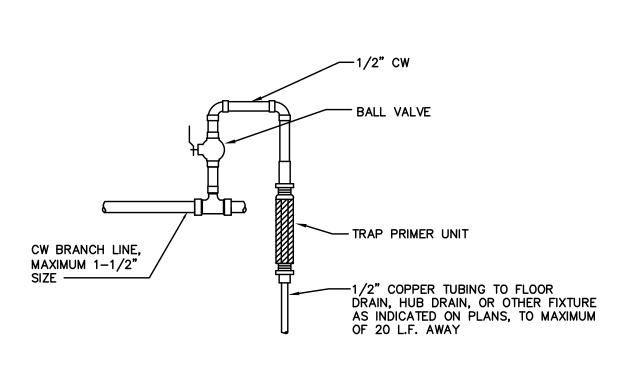




NOTE: WHERE TRAP PRIMER VALVE IS INDICATED TO BE LOCATED RECESSED IN WALL OR CHASE, PROVIDE WALL/CHASE ACCESS DOOR, ADEQUATELY SIZED FOR MAINTENANCE AND REPAIR.

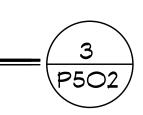
TYPICAL TP2 (MULTIPLE)
TRAP PRIMER DETAIL
NOT TO SCALE

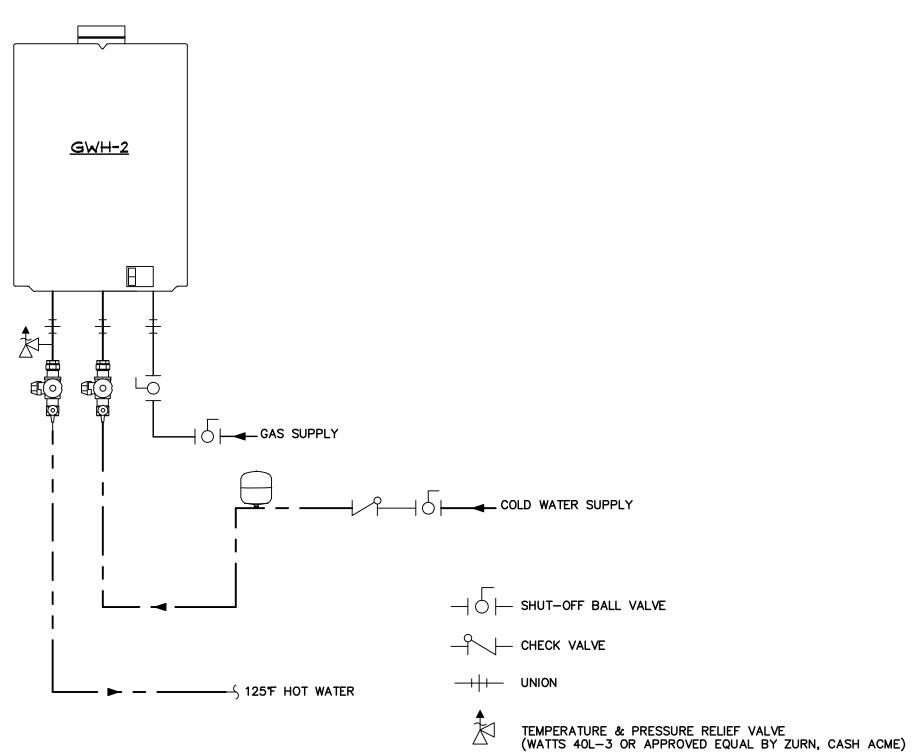




NOTE: WHERE TRAP PRIMER VALVE IS INDICATED TO BE LOCATED RECESSED IN WALL OR CHASE, PROVIDE WALL/CHASE ACCESS DOOR, ADEQUATELY SIZED FOR MAINTENANCE AND REPAIR

TYPICAL TP1 (SINGLE)
TRAP PRIMER DETAIL
NOT TO SCALE





△ (WATTS 40L-3 OR AF

1. RECIRCULATION PUMP TO PROVIDE AT LEAST 2 GPM THROUGH THE SYSTEM AT 10 FT OF HEAD PLUS PIPING LOSSES.

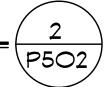
2. PUMP CONTROL SIGNAL IS PREFERRED METHOD TO CONTROL THE RECIRCULATION PUMP. REFER TO THE MANUAL FOR DETAILED INSTRUCTIONS IN SETTING UP THE PUMP WITH THE SYSTEM CONTROLLER.

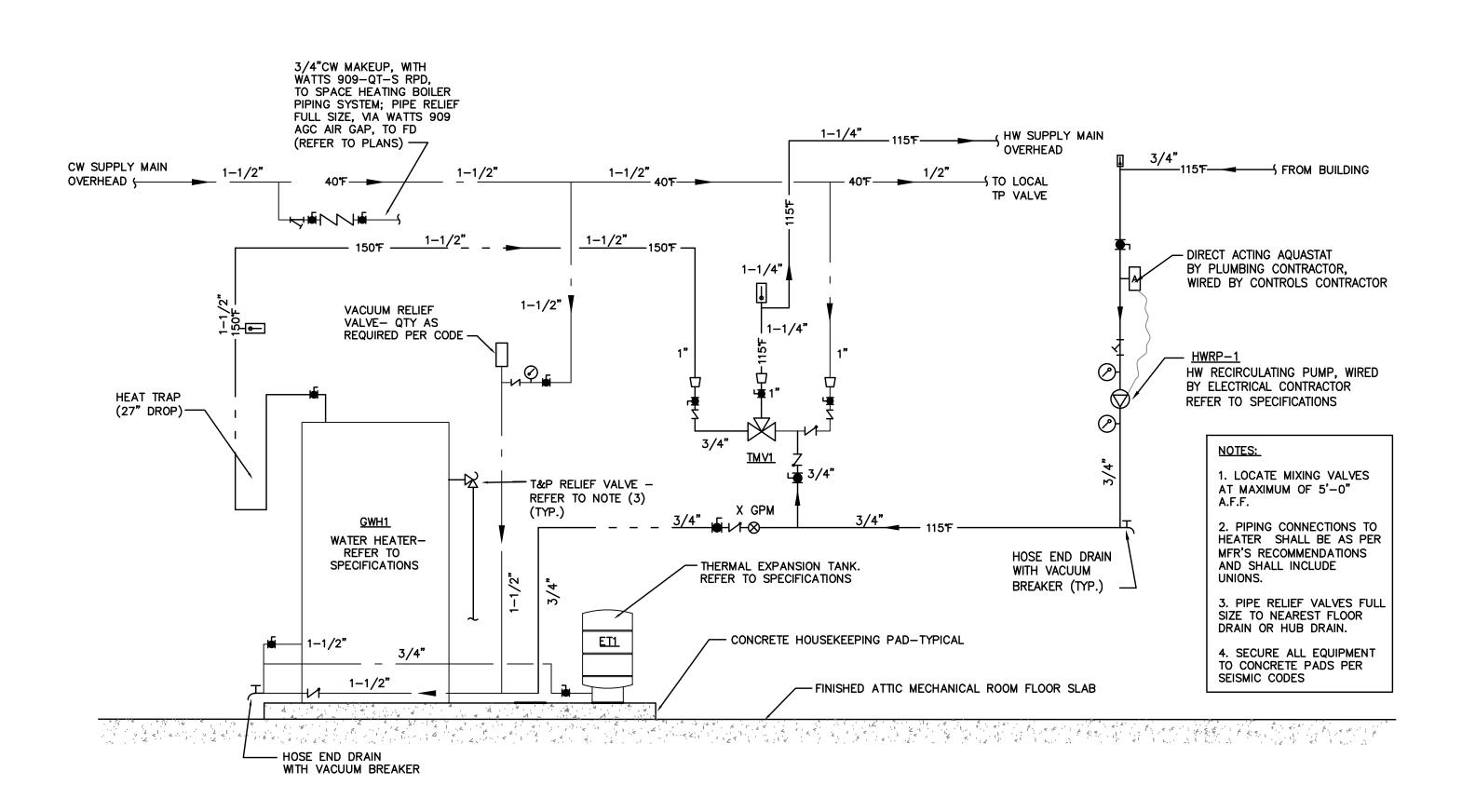
3. IF PUMP IS NOT GOING TO BE CONTROLLED BY THE SYSTEM CONTROLLER, AN AQUASTAT MAY BE USED & INSTALLED INSIDE THE BUILDING. WIRE AQUASTAT TO PUMP ACCORDING TO "CIRCULATION PUMP TO AQUASTAT WIRE DIAGRAM .

4. SYSTEM CONTROLLER CAN BE USED TO CONNECT 2 OR MORE UNIT MULTISYSTEM APPLICATION. REFER TO MANUAL FOR DETAILED INSTRUCTIONS IN SETTING UP SYSTEM CONTROLLER.

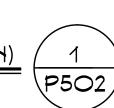
5. WHEN USING A SYSTEM CONTROLLER, USE ONLY A SINGLE REMOTE CONTROLLER.6. SIZE THE PIPING TO ALLOW FOR THE MAXIMUM FLOW RATES OF THE UNITS.

GWH-2 TANKLESS GAS WATER HEATER & ACCESSORIES PIPING DETAIL (SERVES KITCHEN)
NOT TO SCALE





GWH-1 STORAGE GAS WATER HEATER & ACCESSORIES PIPING DETAIL (ATTIC - AREA 'C' ADDITION)



12.140

Expansion and Renovate as New Project - PHASE 1 of 3

Ellington, Connecticut 06029

Crystal Lake Elementary School
284 Sandy Beach Road

SILVER / PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

3190 Whitney Avenue, Hamden, CT 06518-2340 Tel. 203 230 9007 Fax. 203 230 8247 *silverpetrucelli.com*

rision:	Description:	Date:	Revised By:
	ISSUED FOR BIDDING	NOV. 26, 20	D13

PLUMBING DETAILS 1

State Project Number: 048-0058 EA/RR/PS

Date:

JUNE 18, 2013

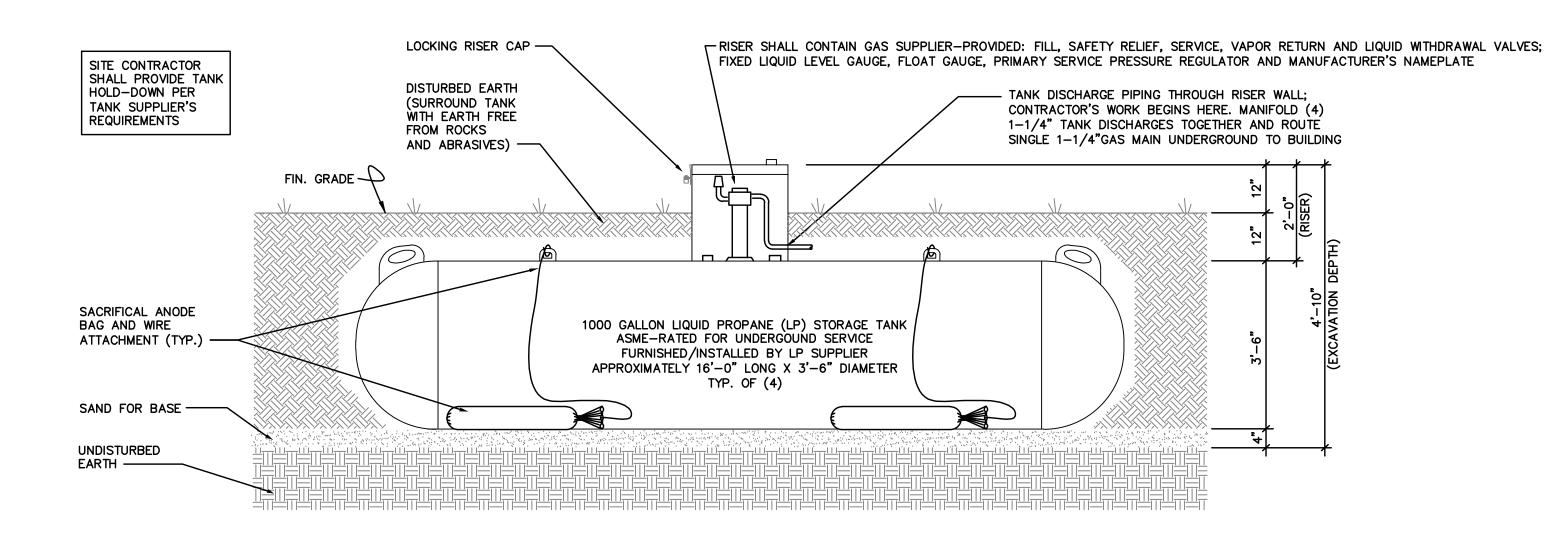
Scale:

AS NOTED

Drawn By:

MBQ

Project Number:

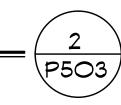


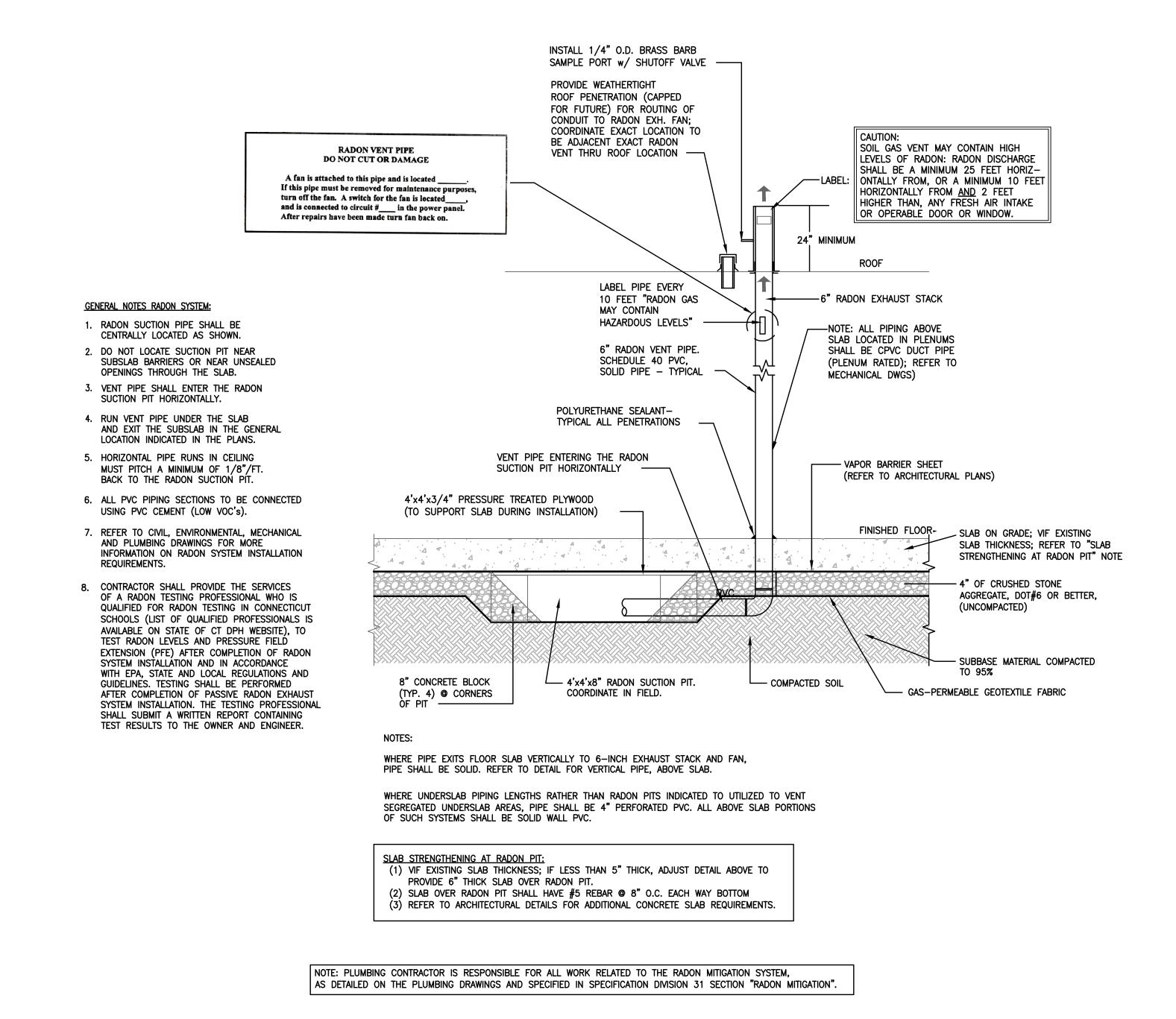
NOTES:

FOUR (4) 1000 GALLON UNDERGROUND LP STORAGE TANK INSTALLATIONS ARE REQUIRED. REFER TO CIVIL DRAWINGS FOR INSTALLATION LOCATION. REFER TO CIVIL DRAWINGS/SPECS AND SPEC SECTION 231123 FOR LP FUEL SUPPLIER AND PROJECT CONTRACTOR WORK SCOPES.

THIS DETAIL IS APPROXIMATE. ACTUAL QUANTITY AND STORAGE VOLUMES OF TANKS, AND PARTICULARS OF INSTALLATION AND ACCESSORIES SHALL BE CONFIRMED AND COORDINATED WITH THE PROPANE SUPPLIER CONTRACTED BY THE OWNER.

UNDERGROUND LIQUID PROPANE TANK STORAGE DETAILS SCALE: NOT TO SCALE





TYPICAL (RADON) SUBSLAB DEPRESSURIZATION DETAIL SCALE: NOT TO SCALE

= 1 P5O3

Expansion and Renovate as New Project - PHASE 1 of 3

Ellington, Connecticut 06029

Crystal Lake Elementary School
284 Sandy Beach Road



Date: Revised By:

State Project Number: 048-0058 EA/RR/PS